



# Sylvia EKSTRÖM GARCÍA NOMBELA

Place of birth: Stockholm (Sweden)  
Nationality: swiss (GE)  
Marital status: married

ORCID: [0000-0002-2564-5660](https://orcid.org/0000-0002-2564-5660)  
Scopus ID: [24075906000](https://scopus.com/authid/detail.url?authorID=24075906000)  
ResearcherID: [K-2154-2014](https://pubs.acs.org/doi/10.26434/chemrxiv-2014-k2154)  
find me also on:  or 



## Contact details

Department of astronomy  
University of Geneva  
Chemin Pegasi 51 - Sauverny  
CH - 1290 Versoix (GE)

Tel: +41 22 379 24 50  
Fax: +41 22 379 22 05  
[Sylvia.Ekstrom@unige.ch](mailto:Sylvia.Ekstrom@unige.ch)  
→ [webpage](#)

## Education

Sep. 2008 PhD thesis in Astrophysics (*'The evolution of fast rotating massive stars at low or zero metallicity'*) under the supervision of Prof. G. Meynet, Geneva Observatory  
Jan. 2006 MAS in Astronomy, Geneva Observatory  
May 2004 Master's thesis in Physics (*'Rotating Primordial Stars'*), University of Geneva  
Sep. 1988 Midwife diploma, Le Bon Secours, Geneva  
June 1985 Maturité fédérale (greek-latin), Collège Calvin, Geneva

## Prizes, awards, and grants

2023 Leadership Award from the European Business School  
2022-2026 [FNS Grant 212143](#): *Unique insight into binary stars and their close environment*  
2014 MERAC Funding and Travel Award for the project *Stellar populations, from theory to observation*  
2008 Plantamour-Prévost Prize, University of Geneva

## Positions

since Apr. 2009 Scientific collaborator at the Geneva Observatory:  
50% research in the stellar evolution group (see page 2)  
50% head of communication for the Department (see page 4)  
Sep. 2008 – Postdoctoral researcher in the stellar evolution group of the Geneva Observatory  
1988 - 1999 Midwife position at Hôpital de zone, Morges (childbirth classes, prenatal care, labour and delivery unit, postnatal care)

## Membership

since 2023 Scientific commission of the Swiss society of chronometry  
since 2014 Foundation board of the St Luc observatory ([OFXB](#))  
since 2012 International Astronomical Union ([IAU](#), Commissions [G2](#) and [G3](#))  
2009-2015 Communication cell of the Geneva University Faculty of Sciences  
2007-2014 Geneva permanent college of experts for the formation of physics lab assistants  
since 2004 Swiss Society of Astronomy and Astrophysics ([SSAA](#))  
European Astronomical Society ([EAS](#))  
1988-2012 Swiss Federation of Midwives ([FSSF](#))

## Service

- since 2021 - Elected member and secretary of the Organising Committee for the IAU [Commission G2](#) (Massive stars)
- 2019 - Ad interim secretary for the Swiss Society of Astrophysics and Astronomy ([SSAA](#))
- since 2013 - ObsGE theses committee
- 2008-2009 - Member of the swiss steering committee for IYA 2009
- Webmaster for the [swiss website](#) and the [romand website](#)
- since 2006 - Webmaster for the [Swiss Astronomy Network for Stellar Evolution](#)
- Webmaster for the [Stellar evolution group](#), Geneva Observatory
- Secretary and webmaster for the female vocal consort [Volubilis](#)

## Skills

- **computing:**

- operating systems: Mac OS X, Linux, Solaris (Unix)
- programming: fortran, python, HTML, css, bash, SuperMongo
- softwares: Affinity (Designer, Photo, Publisher), Office, LaTeX, MuseScore

- **Languages:**

- french (mother tongue)
- english (fluent)
- spanish (advanced)
- german (basics)
- greek (basics)

- **Hobbies:**

- classical singing (member of the female voice consort [Volubilis](#) and of smaller formations)
- cello (member of the duett [Violonc'Elles](#))

## Scientific activities

### Scientific research and work

My domain is massive stars' evolution. The topics I'm mainly interested in are:

- the effects of rotation on stellar evolution and the evolution of fast rotators (Be stars)
- the evolution of supernovae progenitors
- stellar evolution at low metallicity
- the evolution of stellar populations
- stellar nucleosynthesis and the chemical evolution of the Universe

A large part of my work consists in participating in our group's task of providing stellar models to the astronomical community. I'm in charge of maintaining the Geneva stellar evolution code (GENEC) and managing its various developments and analysis tools.

## Teaching and supervising

since 2022	supervisor for the thesis of Luca Sciarini
since 2020	co-supervisor for the thesis of Devesh Nandal and Sophie Tsiatsiou
since 2019	teaching of the astronomical part of the lecture " <i>Evolution</i> " at UniGE (bachelor in biology)
since 2018	co-supervisor for the thesis of Sébastien Martinet
2014-2018	co-supervisor for the thesis of Arthur Choplin
2012-2018	occasional replacement of Prof. Georges Meynet for the astronomical part of the lecture " <i>Evolution</i> " (UniGE)
since 2008	occasional replacement of Prof. Georges Meynet for the lecture " <i>Physique cosmique</i> " (UniGE)
Oct.-Nov. 2006	Teaching at Ecole Romande d'Astronomie, Lausanne
since 2004	Tutor for 3rd year semester projects and master theses
1988-1999	Supervision of many midwife students in delivery unit and postnatal care

## Invited talks, seminars and lectures

Invited review	TASC/KASC workshops <i>Asteroseismology in the Era of Surveys from Space and the Ground: Stars, Planets, and the Milky Way</i> , Leuven (Belgium), July 2022 EWASS S9 symposium <i>Star cluster formation history in the Magellanic Clouds</i> , Prague (Czech Republic), June 2017 <i>First stars V</i> , Heidelberg (Germany), August 2016 <i>The B[e] Phenomenon. Forty Years of Studies</i> , Prague (Czech Republic), July 2016 <i>Massive stars: from <math>\alpha</math> to <math>\Omega</math></i> , Rhodes (Greece), June 2013 VIIIth Tours Symposium, Lenzkirch-Saig (Germany), September 2012 IAU Symposium 272, Paris (France), July 2010
Invited talk	IFPU Focus week <i>Enigmatic first stars and where to find them</i> , Trieste (Italy), May 2023 Colloquium <i>The Human to come</i> , Journ�e mondiale de la Philosophie, UNESCO Paris (France), November 2022 IV Conference of stellar astrophysics, Tucuman (Argentina), June 2022 EAS SS22 <i>The Great Dimming of Betelgeuse: news from the mass loss of red supergiants</i> , virtual meeting, June 2021 POLSTAR science meeting, virtual meeting, March 2021 Conference <i>Stars and their Variability, Observed from Space</i> , Vienna (Austria), August 2019 EWASS SS19 <i>Mass loss of cool evolved stars: a multi-technique approach</i> during EWASS, Lyon (France), June 2019 Workshop <i>Stellar Winds in Wind-fed Systems</i> , Santander (Spain), October 2018 IAUS 344: <i>Dwarf galaxies: from the deep Universe to the present</i> , Vienna (Austria), August 2018 Meeting <i>Evolution and explosion of massive stars</i> , Dublin (Ireland), May 2017 GREAT workshop <i>Massive stars and the Gaia-ESO Survey</i> , Brussels (Belgium), May 2015 ESTER workshop, Toulouse (France), June 2014 GREAT workshop <i>Young Clusters in the Gaia-ESO Survey</i> , Palermo (Italy), May 2014 Betelgeuse workshop, Paris (France), November 2012 <i>Mapping oxygen in the Universe</i> , Tenerife (Spain), May 2012 CHARA workshop, Nice (France), March 2009
Seminars	Mazaryk University, Brno (Czech republic), November 2020 Trinity College Dublin (Republic of Ireland), February 2019 Basel University (Switzerland), May 2009 GRAAL, Montpellier University (France), November 2008
Lectures	Formation continue des enseignants du secondaire, Lyon, March 2022 and May 2023 RED'14, Le Teich, February 2014 Formation continue des enseignants en physique genevois, Geneva, January 2014 RED'12, Le Teich, February 2012 Formation continue des enseignants en physique genevois, Geneva, January 2009 Formation continue de la Commission Romande de Physique, Sion, September 2009

## Service

2021-2022	Expert in the stellar panel for the selection of the Hubble Fellowships 2022
2021-2022	Member of the stellar panel for the <a href="#">Astronet roadmap 2022-2035</a>
2020-2022	External panelist for Cycle 28 and 29 of <i>Hubble Space Telescope</i> Time Allocating Committee
2019-2022	Member of the SOC for the IAU 361 " <i>Massive stars near &amp; far</i> ", held in Cavan, Ireland, May 18-22 2022 (postponed twice due to pandemics)
2019	Member of the SOC+LOC for the conference " <i>CEMP stars as probe of the first-stars nucleosynthesis, the IMF and Galactic assembly</i> ", held in Geneva, Sep. 9-13 2019
2016-2018	Member of the SOC for the workshop " <i>A revolution in stellar physics with Gaia and large surveys</i> ", Warsaw, Poland, Sep. 3-7 2018
2015-2017	Member of the SOC for the conference " <i>AGB-supernovae mass transition</i> " Rome, Italy, Mar. 27-31 2017
2014-2016	Member of the SOC for the IAU Symposium 329 " <i>The lives and death-throes of massive stars</i> " Auckland, New Zealand, Nov. 28 - Dec. 2 2016
2013-2014	Co-chair of the LOC for the IAU Symposium 307 ' <i>New windows on massive stars</i> ', Geneva June 23-27 2014, webmaster for the <a href="#">website</a>
2010	Member of the LOC for the 1st SCfA Summerschool ' <i>Stars and Supernovae in Galaxies</i> ', St-Luc VS, September 13-17, webmaster for the <a href="#">website</a>
2009	Member of the LOC for the IAU Symposium 268 ' <i>Light elements in the Universe</i> ', Geneva November 9-13, webmaster for the <a href="#">website</a>

I'm a regular referee for various journals (*A&A*, *ApJ*, *MNRAS*, *Nature Astronomy*) and for national science funds like FNRS Belgium, NWO Netherlands, ARC Belgium.

## Publications

I'm an author or co-author of 183 articles, of which 88 in refereed journals (*Astronomy & Astrophysics*, *Monthly Notices of the Royal Astronomical Society*, *Astrophysical Journal*, *Astronomische Nachrichten*, *Physics Review D*, ...), and a co-author in 2 collective books. I also wrote 8 entries in the Encyclopedia of Astrobiology. These publications gather more than 8'000 citations and grant me an h-index of 43. I'm also a contributor for 13 catalogue entries in CDS. A [complete list](#) of publications can be found at the end of this resumé or in [ADS](#).

## Outreach activities

### Projects

<a href="#">Stellarium Gonergrat</a>	Coordination of the ObsGE participation, responsible for the conception of the web interface.
<a href="#">Astronomy Events</a>	Conception of the web interface
<a href="#">Ramène ta science</a>	Conception of the astronomy kit, participation for the ObsGE
<a href="#">L'Oreille des Kids</a>	Organisation and coordination of the participation of ObsGE to the project
<a href="#">Nuit de la Science</a>	Participation in 2006 and 2008 coordination of the ObsGE stand in 2010, 2012, 2014, 2016, 2018, and 2022.

### In the media

Internet	- Libradio, direct from <a href="#">Féerie d'une nuit</a> August 11 2018 ( <a href="#">Café astro</a> ) - regularly answering to questions on <a href="#">RTS Découverte</a>
Radio, TV	- summary page on <a href="#">Avidexperts.ch</a> - Many interviews on RTS La Première, <i>CQFD</i> - Couleur 3, <a href="#">Les Raconteurs</a> , March 24 2021 - RTS La Première, <i>Les échos de Vacarme</i> November 3 2019 (' <i>L'espace fait-il toujours rêver ?</i> ') - RTS La Première, <i>Premier rendez-vous</i> August 26 2019 - RTS La Première, <i>Le 12:30</i> December 13 2017 ( <a href="#">about the Geminids</a> ) - RTS La Première, <i>La Matinale</i> October 4 2017 ( <a href="#">about the Stellarium Gonergrat</a> )

- RTS La Première, *Deux heures avant la nuit* July 29 2016
- RTS La Première, *Les Audacieux*, July 29 2015
- RTS La Première, *Motus et Bouche cousue*, July 16 2013
- RTS La Première, special emission of *Impatience*, June 30 2011

- Press
- Ère magazine, ed. Dec. 2017, section [Regard genevois](#)
  - *Scanner* 11 chronicles in [Le Temps](#) between 2012 and 2015
  - regularly answering to kids questions in [Migros Magazine](#)
  - Terre & Nature, special Geneva edition, August 15 2013

### Public outreach conferences

- |   |   |
|---|---|
| "Formation des premières étoiles de l'Univers"      | given in Geneva (Apr. 2005)   |
| "Du nuage au nuage, le grand cycle des étoiles"     | given in Geneva (Jul. 2006), Yverdon VD (Feb. 2009), Malvilliers NE (Sept. 2009), Sion VS (May 2010), Signal-de-Bougy VD (Aug. 2010), Fribourg (Jan. 2014)                            |
| "La lumière dans tous ses états"                    | given in Geneva (Apr. 2009), Onex GE (Feb. 2011), Blonay VD (May 2011), Fort-l'Ecluse (Jul. 2011) Monthey VS (Jan. 2013), Signal-de-Bougy VD (Aug. 2013), Ferney-Voltaire (Feb. 2015) |
| "Vol de Nuit, de la Terre aux confins de l'Univers" | given in Grignon (Sept. 2009), Annemasse (Nov. 2009), Reignier-Esery (Nov. 2010), Chillon (Sep. 2011), Neuchâtel (Jul. 2012), Sion (Sept. 2012), Versoix (Nov. 2022)                  |
| "Dernières nouvelles des premières étoiles"         | given in Monthey VS (Jan. 2010)   |
| "Où sommes-nous dans l'Univers ?"                   | given in Geneva (Nov. 2010, Sep. 2011, Mar. 2014, Nov.2017), Yverdon VD (Feb. 2015)   |
| "Dürrenmatt et les astres"                          | given in Neuchâtel (Dec. 2010)  |
| "Du Big bang à la Vie"                              | given in St Luc (Jul. 2012), Morges (Nov. 2012), Yverdon (Apr. 2013), Malvilliers NE (May 2013) Neuchâtel (July 2013), Ferney-Voltaire (Sep. 2015)                                    |
| "SN1987A : autopsie d'une supernova"                | given in Renens (Apr. 2017), Divonne-les-Bains (Apr. 2017) Monthey (Sep. 2017), Morges (as a webinar for ASTRAC, March 2021)  |
| "Regards croisés : de l'astre à l'image"            | given in Geneva (Sep. 2017)   |
| "La vie secrète des étoiles"                        | given in Geneva (March 2018)  |
| "La recherche en astronomie"                        | given in Geneva (Aug. 2018), Monthey (Sep. 2019)  |
| "La face cachée de la Lune"                         | given in Divonne-les-Bains (June 2019)  |
| "Nous ne vivrons pas sur Mars ni ailleurs"          | given in Monthey (September 2021), Sion (Apr. 2022), Versoix (March 2023), Lausanne (April 2023), Geneva (April 2023)   |

### Events

- |            |   |
|------------|---|
| June 2023  | Closing open days for the 250th anniversary of ObsGE (organisation of the activities) |
| June 2022  | Open days for the 250th anniversary of ObsGE (organisation of the activities)         |
| Feb. 2022  | <a href="#">Oxford Union Debate: Humanity should NOT populate Mars</a>                |
| Dec. 2017  | Concert <i>Bach parmi les étoiles</i> , Montreux                                      |
| Jan. 2016  | Q&A session after the projection of <i>The Martian</i> at Ciné-Versoix                |
| Feb. 2014  | Q&A session after the projection of <i>Gravity</i> at Ciné-Versoix                    |
| since 2012 | Astro-café at <i>Féerie d'une nuit</i> , Signal-de-Bougy (VD)                         |

### Outreach book

- "[Nous ne vivrons pas sur Mars ni ailleurs](#)", co-written with Javier G. Nombela, Ed. Favre, Oct. 2020  
 Related documentary on [www.mars-mission-impossible.ch](http://www.mars-mission-impossible.ch)

## Publications in peer-reviewed journals

- [1] ANGULAR MOMENTUM TRANSPORT BY MAGNETIC FIELDS IN MAIN SEQUENCE STARS WITH GAMMA DORADUS PULSATORS.  
Moyano F. D., Eggenberger P., Salmon S. J. A. J., Mombarg J. S. G., and Ekström S.  
(2023) A&A (**submitted**) arXiv:2304.00674 – arXiv:2304.00674 [[ADS](#)]
- [2] THE EVOLUTIONARY PROPERTIES OF THE BLUE LOOP UNDER THE INFLUENCE OF RAPID ROTATION AND LOW METALLICITY.  
Zhao Liuyan, Song Hanfeng, Meynet Georges, Maeder Andre, Ekström Sylvia, Zhang Ruiyu, Qin Ying, Qi Shitao, and Zhan Qiong.  
(2023) A&A **674** A92 [[ADS](#)]
- [3] THE TIME-AVERAGED MASS-LOSS RATES OF RED SUPERGIANTS AS REVEALED BY THEIR LUMINOSITY FUNCTIONS IN M31 AND M33.  
Massey Philip, Neugent Kathryn F., Ekström Sylvia, Georgy Cyril, and Meynet Georges.  
(2023) ApJ **942** 69 – arXiv:2211.14147 [[ADS](#)]
- [4] THE EFFECTS OF STELLAR ROTATION ALONG THE MAIN SEQUENCE OF THE 100-MYR-OLD MASSIVE CLUSTER NGC 1850.  
Kamann S., Saracino S., Bastian N., Gossage S., Usher C., Baade D., Cabrera-Ziri I., de Mink S. E., Ekstrom S., Georgy C., Hilker M., Larsen S. S., Mackey D., Niederhofer F., Platais I., and Yong D.  
(2023) MNRAS **518** 1505 – arXiv:2211.00693 [[ADS](#)]
- [5] UNDERSTANDING STRUCTURE IN LINE-DRIVEN STELLAR WINDS USING ULTRAVIOLET SPECTROPOLARIMETRY IN THE TIME DOMAIN.  
Gayley Kenneth G., Vink Jorick S., ud-Doula Asif, David-Uraz Alexandre, Ignace Richard, Prinja Raman, St-Louis Nicole, Ekström Sylvia, Nazé Yaël, Shenar Tomer, Scowen Paul A., Sudnik Natallia, Owocki Stan P., Sundqvist Jon O., Driessen Florian A., and Hennicker Levin.  
(2022) Ap&SS **367** 123 – arXiv:2111.11633 [[ADS](#)]
- [6] EVIDENCE OF DEEP MIXING IN IRS 7, A COOL MASSIVE SUPERGIANT MEMBER OF THE GALACTIC NUCLEAR STAR CLUSTER.  
Guerço Rafael, Smith Verne V., Cunha Katia, Ekström Sylvia, Abia Carlos, Plez Bertrand, Meynet Georges, Ramirez Solange V., Prantzos Nikos, Sellgren Kris, Hayes Cristian R., and Majewski Steven R.  
(2022) MNRAS **516** 2801 – arXiv:2208.10529 [[ADS](#)]
- [7] VERY MASSIVE STAR WINDS AS SOURCES OF THE SHORT-LIVED RADIOACTIVE ISOTOPE  $^{26}\text{Al}$ .  
Martinet Sébastien, Meynet Georges, Nandal Devesh, Ekström Sylvia, Georgy Cyril, Haemmerlé Lionel, Hirschi Raphael, Yusof Norhasliza, Gounelle Matthieu, and Dwarkadas Vikram.  
(2022) A&A **664** A181 – arXiv:2205.15184 [[ADS](#)]
- [8] GRIDS OF STELLAR MODELS WITH ROTATION VII: MODELS FROM 0.8 TO 300  $M_{\odot}$  AT SUPERSOLAR METALLICITY ( $Z = 0.020$ ).  
Yusof Norhasliza, Hirschi Raphael, Eggenberger Patrick, Ekström Sylvia, Georgy Cyril, Sibony Yves, Crowther Paul A., Meynet Georges, Kassim Hasan Abu, Harun Wan Aishah Wan, Maeder André, Groh Jose H., Farrell Eoin, and Murphy Laura.  
(2022) MNRAS **511**(2) 2814 – arXiv:2201.08645 [[ADS](#)]
- [9] A NEW  $^{12}\text{C} + ^{12}\text{C}$  NUCLEAR REACTION RATE: IMPACT ON STELLAR EVOLUTION.  
Monpriat E., Martinet S., Courtin S., Heine M., Ekström S., Jenkins D. G., Choplin A., Adsley P., Curien D., Moukaddam M., Nippert J., Tsiatsiou S., and Meynet G.  
(2022) A&A **660** A47 – arXiv:2111.15224 [[ADS](#)]
- [10] NEWS FROM GAIA ON  $\sigma$  ORI E: A CASE STUDY FOR THE WIND MAGNETIC BRAKING PROCESS.  
Song H. F., Meynet G., Maeder A., Mowlavi N., Stroud S. R., Keszthelyi Z., Ekström S., Eggenberger P.,

- Georgy C., Wade G. A., and Qin Y.  
(2022) *A&A* **657** A60 – arXiv:2108.13734 [[ADS](#)]
- [11] IONIZING PHOTON PRODUCTION OF POPULATION III STARS: EFFECTS OF ROTATION, CONVECTION, AND INITIAL MASS FUNCTION.  
Murphy Laura J., Groh Jose H., Farrell Eoin, Meynet Georges, Ekström Sylvia, Tsiatsiou Sophie, Hackett Alexander, and Martinet Sébastien.  
(2021) *MNRAS* **506** 5731 – arXiv:2105.06900 [[ADS](#)]
- [12] GRIDS OF STELLAR MODELS WITH ROTATION. VI. MODELS FROM 0.8 TO 120  $M_{\odot}$  AT A METALLICITY  $Z = 0.006$ .  
Eggenberger Patrick, Ekström Sylvia, Georgy Cyril, Martinet Sébastien, Pezzotti Camilla, Nandal Devesh, Meynet Georges, Buldgen Gaël, Salmon Sébastien, Haemmerlé Lionel, Maeder André, Hirschi Raphael, Yusof Norhasliza, Groh José, Farrell Eoin, Murphy Laura, and Choplin Arthur.  
(2021) *A&A* **652** A137 [[ADS](#)]
- [13] STAR-PLANET INTERACTIONS. VI. TIDES, STELLAR ACTIVITY, AND PLANETARY EVAPORATION.  
Rao Suvrat, Pezzotti Camilla, Meynet Georges, Eggenberger Patrick, Buldgen Gaël, Mordasini Christoph, Bourrier Vincent, Ekström Sylvia, and Georgy Cyril.  
(2021) *A&A* **651** A50 – arXiv:2104.07397 [[ADS](#)]
- [14] CONVECTIVE CORE ENTRAINMENT IN 1D MAIN-SEQUENCE STELLAR MODELS.  
Scott L. J. A., Hirschi R., Georgy C., Arnett W. D., Meakin C., Kaiser E. A., Ekström S., and Yusof N.  
(2021) *MNRAS* **503** 4208 [[ADS](#)]
- [15] MASSIVE STAR MODELLING AND NUCLEOSYNTHESIS.  
Ekström Sylvia.  
(2021) *Frontiers in Astronomy and Space Sciences* **8** 53 [[ADS](#)]
- [16] CONVECTIVE CORE SIZES IN ROTATING MASSIVE STARS. I. CONSTRAINTS FROM SOLAR METALLICITY OB FIELD STARS.  
Martinet S., Meynet G., Ekström S., Simón-Díaz S., Holgado G., Castro N., Georgy C., Eggenberger P., Buldgen G., Salmon S., Hirschi R., Groh J., Farrell E., and Murphy L.  
(2021) *A&A* **648** A126 – arXiv:2103.03672 [[ADS](#)]
- [17] IS GW190521 THE MERGER OF BLACK HOLES FROM THE FIRST STELLAR GENERATIONS?  
Farrell Eoin, Groh Jose H., Hirschi Raphael, Murphy Laura, Kaiser Etienne, Ekström Sylvia, Georgy Cyril, and Meynet Georges.  
(2021) *MNRAS* **502** L40 – arXiv:2009.06585 [[ADS](#)]
- [18] GRIDS OF STELLAR MODELS WITH ROTATION. V. MODELS FROM 1.7 TO 120  $M_{\odot}$  AT ZERO METALLICITY.  
Murphy Laura J., Groh Jose H., Ekström Sylvia, Meynet Georges, Pezzotti Camila, Georgy Cyril, Choplin Arthur, Eggenberger Patrick, Farrell Eoin, Haemmerlé Lionel, Hirschi Raphael, Maeder André, and Martinet Sébastien.  
(2021) *MNRAS* **501** 2745 – arXiv:2012.07420 [[ADS](#)]
- [19] THE ENERGY TRANSPORT INDUCED BY HORIZONTAL TURBULENCE IN ROTATING W-TYPE W UMA CONTACT BINARIES.  
Song Hanfeng, Meynet Georges, Maeder Andre, Peng Weiguo, Long Gang, Zhang Ruiyu, Ekström Sylvia, Georgy Cyril, and Huang Runqian.  
(2020) *ApJ* **905** 39 [[ADS](#)]
- [20] APSIDAL MOTION IN THE MASSIVE BINARY HD 152248.  
Rosu S., Rauw G., Conroy K. E., Gosset E., Manfroid J., and Royer P.  
(2020) *A&A* **635** A145 – arXiv:2002.01271 [[ADS](#)]
- [21] MASSIVE BLACK HOLES REGULATED BY LUMINOUS BLUE VARIABLE MASS LOSS AND MAGNETIC FIELDS.  
Groh Jose H., Farrell Eoin J., Meynet Georges, Smith Nathan, Murphy Laura, Allan Andrew P., Georgy Cyril, and Ekström Sylvia.  
(2020) *ApJ* **900** 98 – arXiv:1912.00994 [[ADS](#)]

- [22] SNAPSHOT: CONNECTIONS BETWEEN INTERNAL AND SURFACE PROPERTIES OF MASSIVE STARS. Farrell Eoin J., Groh Jose H., Meynet Georges, Eldridge J. J., Ekström Sylvia, and Georgy Cyril. (2020) MNRAS **495** 4659 – arXiv:2005.06454 [[ADS](#)]
- [23] EVOLUTIONARY ROADS LEADING TO LOW EFFECTIVE SPINS, HIGH BLACK HOLE MASSES, AND O1/O2 RATES FOR LIGO/VIRGO BINARY BLACK HOLES. Belczynski K., Klencki J., Fields C. E., Olejak A., Berti E., Meynet G., Fryer C. L., Holz D. E., O’Shaughnessy R., Brown D. A., Bulik T., Leung S. C., Nomoto K., Madau P., Hirschi R., Kaiser E., Jones S., Mondal S., Chruslinska M., Drozda P., Gerosa D., Doctor Z., Giersz M., Ekstrom S., Georgy C., Askar A., Baibhav V., Wysocki D., Natan T., Farr W. M., Wiktorowicz G., Coleman Miller M., Farr B., and Lasota J. P. (2020) A&A **636** A104 – arXiv:1706.07053 [[ADS](#)]
- [24] THE LUMINOSITY FUNCTION OF RED SUPERGIANTS IN M31. Neugent Kathryn F., Massey Philip, Georgy Cyril, Drout Maria R., Mommert Michael, Levesque Emily M., Meynet Georges, and Ekström Sylvia. (2020) ApJ **889** 44 – arXiv:1911.10638 [[ADS](#)]
- [25] GRIDS OF STELLAR MODELS WITH ROTATION. IV. MODELS FROM 1.7 TO 120  $M_{\odot}$  AT A METALLICITY  $Z = 0.0004$ . Groh J. H., Ekström S., Georgy C., Meynet G., Choplin A., Eggenberger P., Hirschi R., Maeder A., Murphy L. J., Boian I., and Farrell E. J. (2019) A&A **627** A24 – arXiv:1904.04009 [[ADS](#)]
- [26] STELLAR MODELS AND ISOCHRONES FROM LOW-MASS TO MASSIVE STARS INCLUDING PRE-MAIN SEQUENCE PHASE WITH ACCRETION. Haemmerlé L., Eggenberger P., Ekström S., Georgy C., Meynet G., Postel A., Audard M., Sørensen M., and Fragos T. (2019) A&A **624** A137 – arXiv:1903.10550 [[ADS](#)]
- [27] DISAPPEARANCE OF THE EXTENDED MAIN SEQUENCE TURN-OFF IN INTERMEDIATE AGE CLUSTERS AS A CONSEQUENCE OF MAGNETIC BRAKING. Georgy C., Charbonnel C., Amard L., Bastian N., Ekström S., Lardo C., Palacios A., Eggenberger P., Cabrera-Ziri I., Gallet F., and Lagarde N. (2019) A&A **622** A66 [[ADS](#)]
- [28] ASTEROSEISMOLOGY OF EVOLVED STARS TO CONSTRAIN THE INTERNAL TRANSPORT OF ANGULAR MOMENTUM. I. EFFICIENCY OF TRANSPORT DURING THE SUBGIANT PHASE. Eggenberger P., Deheuvels S., Miglio A., Ekström S., Georgy C., Meynet G., Lagarde N., Salmon S., Buldgen G., Montalbán J., Spada F., and Ballot J. (2019) A&A **621** A66 – arXiv:1812.04995 [[ADS](#)]
- [29] IMPACT OF BINARY INTERACTION ON THE EVOLUTION OF BLUE SUPERGIANTS. THE FLUX-WEIGHTED GRAVITY LUMINOSITY RELATIONSHIP AND EXTRAGALACTIC DISTANCE DETERMINATIONS. Farrell E. J., Groh J. H., Meynet G., Kudritzki R., Eldridge J. J., Georgy C., Ekström S., and Yoon S. C. (2019) A&A **621** A22 – arXiv:1810.01830 [[ADS](#)]
- [30] EXTENDED MAIN SEQUENCE TURNOFFS IN OPEN CLUSTERS AS SEEN BY GAIA - I. NGC 2818 AND THE ROLE OF STELLAR ROTATION. Bastian N., Kamann S., Cabrera-Ziri I., Georgy C., Ekström S., Charbonnel C., de Juan Ovelar M., and Usher C. (2018) MNRAS **480** 3739 – arXiv:1807.10779 [[ADS](#)]
- [31] NON-STANDARD S-PROCESS IN MASSIVE ROTATING STARS. YIELDS OF 10-150  $M_{\odot}$  MODELS AT  $Z = 10^{-3}$ . Choplin Arthur, Hirschi Raphael, Meynet Georges, Ekström Sylvia, Chiappini Cristina, and Laird Alison. (2018) A&A **618** A133 – arXiv:1807.06974 [[ADS](#)]
- [32] STAR-PLANET INTERACTIONS. V. DYNAMICAL AND EQUILIBRIUM TIDES IN CONVECTIVE ZONES. Rao Suvrat, Meynet Georges, Eggenberger Patrick, Haemmerlé Lionel, Privitera Giovanni, Georgy Cyril, Ekström Sylvia, and Mordasini Christoph. (2018) A&A **618** A18 – arXiv:1807.01474 [[ADS](#)]



- [33] QUIESCENT AND ACTIVE PHASES IN BE STARS: A WISE SNAPSHOT OF YOUNG GALACTIC OPEN CLUSTERS.  
Granada A., Jones C. E., Sigut T. A. A., Semaan T., Georgy C., Meynet G., and Ekström S.  
(2018) *AJ* **155** 50 – arXiv:1712.05209 [[ADS](#)]
- [34] CLOSE BINARY EVOLUTION. II. IMPACT OF TIDES, WIND MAGNETIC BRAKING, AND INTERNAL ANGULAR MOMENTUM TRANSPORT.  
Song H. F., Meynet G., Maeder A., Ekström S., Eggenberger P., Georgy C., Qin Y., Fragos T., Soerensen M., Barblan F., and Wade G. A.  
(2017) *A&A* **609** A3 – arXiv:1709.01902 [[ADS](#)]
- [35] ARE SOME CEMP-S STARS THE DAUGHTERS OF SPINSTARS?  
Choplin A., Hirschi R., Meynet G., and Ekström S.  
(2017) *A&A* **607** L3 – arXiv:1710.05564 [[ADS](#)]
- [36] PRE-SUPERNOVA MIXING IN CEMP-NO SOURCE STARS.  
Choplin A., Ekström S., Meynet G., Maeder A., Georgy C., and Hirschi R.  
(2017) *A&A* **605** A63 – arXiv:1706.05313 [[ADS](#)]
- [37] PERIOD-LUMINOSITY RELATIONS OF FAST-ROTATING B-TYPE STARS IN THE YOUNG OPEN CLUSTER NGC 3766.  
Saio H., Ekström S., Mowlavi N., Georgy C., Saesen S., Eggenberger P., Semaan T., and Salmon S. J. A. J.  
(2017) *MNRAS* **467** 3864 – arXiv:1702.02306 [[ADS](#)]
- [38] STAR-PLANET INTERACTIONS. IV. POSSIBILITY OF DETECTING THE ORBIT-SHRINKING OF A PLANET AROUND A RED GIANT.  
Meynet G., Eggenberger P., Privitera G., Georgy C., Ekström S., Alibert Y., and Lovis C.  
(2017) *A&A* **602** L7 – arXiv:1706.02234 [[ADS](#)]
- [39] POSSIBLE PAIR-INSTABILITY SUPERNOVAE AT SOLAR METALLICITY FROM MAGNETIC STELLAR PROGENITORS.  
Georgy C., Meynet G., Ekström S., Wade G. A., Petit V., Keszthelyi Z., and Hirschi R.  
(2017) *A&A* **599** L5 – arXiv:1702.02340 [[ADS](#)]
- [40] A STUDY OF THE EFFECT OF ROTATIONAL MIXING ON MASSIVE STARS EVOLUTION: SURFACE ABUNDANCES OF GALACTIC O7-8 GIANT STARS.  
Martins F., Simón-Díaz S., Barbá R. H., Gamen R. C., and Ekström S.  
(2017) *A&A* **599** A30 – arXiv:1611.05223 [[ADS](#)]
- [41] CONSTRAINING THE EFFICIENCY OF ANGULAR MOMENTUM TRANSPORT WITH ASTEROSEISMOLOGY OF RED GIANTS: THE EFFECT OF STELLAR MASS.  
Eggenberger P., Lagarde N., Miglio A., Montalbán J., Ekström S., Georgy C., Meynet G., Salmon S., Ceillier T., García R. A., Mathis S., Deheuvels S., Maeder A., den Hartogh J. W., and Hirschi R.  
(2017) *A&A* **599** A18 – arXiv:1612.04258 [[ADS](#)]
- [42] STELLAR VARIABILITY IN OPEN CLUSTERS. II. DISCOVERY OF A NEW PERIOD-LUMINOSITY RELATION IN A CLASS OF FAST-ROTATING PULSATING STARS IN NGC 3766.  
Mowlavi N., Saesen S., Semaan T., Eggenberger P., Barblan F., Eyer L., Ekström S., and Georgy C.  
(2016) *A&A* **595** L1 [[ADS](#)]
- [43] MODELS OF ROTATING STARS CONSTRAINED BY ASTEROSEISMIC MEASUREMENTS OF RED GIANTS.  
Eggenberger P., Lagarde N., Miglio A., Montalbán J., Ekström S., Georgy C., Salmon S., Meynet G., and Maeder A.  
(2016) *Astronomische Nachrichten* **337** 832 [[ADS](#)]
- [44] IMPACT OF ROTATION ON STELLAR MODELS.  
Meynet G., Maeder A., Eggenberger P., Ekström S., Georgy C., Chiappini C., Privitera G., and Choplin A.  
(2016) *Astronomische Nachrichten* **337** 827 – arXiv:1512.00767 [[ADS](#)]

- [45] HIGH SURFACE MAGNETIC FIELD IN RED GIANTS AS A NEW SIGNATURE OF PLANET ENGULFMENT?  
Privitera G., Meynet G., Eggenberger P., Georgy C., Ekström S., Vidotto A. A., Bianda M., Villaver E., and ud-Doula A.  
(2016) *A&A* **593** L15 – arXiv:1608.08893 [[ADS](#)]
- [46] A YOUNG CLUSTER WITH AN EXTENDED MAIN-SEQUENCE TURNOFF: CONFIRMATION OF A PREDICTION OF THE STELLAR ROTATION SCENARIO.  
Bastian N., Niederhofer F., Kozhurina-Platais V., Salaris M., Larsen S., Cabrera-Ziri I., Cordero M., Ekström S., Geisler D., Georgy C., Hilker M., Kacharov N., Li C., Mackey D., Mucciarelli A., and Platais I.  
(2016) *MNRAS* **460** L20 – arXiv:1604.01046 [[ADS](#)]
- [47] ON THE EFFECT OF ROTATION ON POPULATIONS OF CLASSICAL CEPHEIDS. II. PULSATION ANALYSIS FOR METALLICITIES 0.014, 0.006, AND 0.002.  
Anderson R. I., Saio H., Ekström S., Georgy C., and Meynet G.  
(2016) *A&A* **591** A8 – arXiv:1604.05691 [[ADS](#)]
- [48] S-PROCESS PRODUCTION IN ROTATING MASSIVE STARS AT SOLAR AND LOW METALLICITIES.  
Frischknecht U., Hirschi R., Pignatari M., Maeder A., Meynet G., Chiappini C., Thielemann F.-K., Rauscher T., Georgy C., and Ekström S.  
(2016) *MNRAS* **456** 1803 – arXiv:1511.05730 [[ADS](#)]
- [49] MASSIVE STAR EVOLUTION IN CLOSE BINARIES. CONDITIONS FOR HOMOGENEOUS CHEMICAL EVOLUTION.  
Song H. F., Meynet G., Maeder A., Ekström S., and Eggenberger P.  
(2016) *A&A* **585** A120 – arXiv:1508.06094 [[ADS](#)]
- [50] APPARENT AGE SPREADS IN CLUSTERS AND THE ROLE OF STELLAR ROTATION.  
Niederhofer F., Georgy C., Bastian N., and Ekström S.  
(2015) *MNRAS* **453** 2070 – arXiv:1507.07561 [[ADS](#)]
- [51] IMPACT OF MASS-LOSS ON THE EVOLUTION AND PRE-SUPERNOVA PROPERTIES OF RED SUPERGIANTS.  
Meynet G., Chomienne V., Ekström S., Georgy C., Granada A., Groh J., Maeder A., Eggenberger P., Levesque E., and Massey P.  
(2015) *A&A* **575** A60 – arXiv:1410.8721 [[ADS](#)]
- [52] POPULATIONS OF ROTATING STARS. III. SYCLIST, THE NEW GENEVA POPULATION SYNTHESIS CODE.  
Georgy C., Granada A., Ekström S., Meynet G., Anderson R. I., Wyttenbach A., Eggenberger P., and Maeder A.  
(2014) *A&A* **566** A21 – arXiv:1404.6952 [[ADS](#)]
- [53] THE EFFECTS OF STELLAR ROTATION. II. A COMPREHENSIVE SET OF STARBURST99 MODELS.  
Leitherer C., Ekström S., Meynet G., Schaerer D., Agienko K. B., and Levesque E. M.  
(2014) *ApJS* **212** 14 – arXiv:1403.5444 [[ADS](#)]
- [54] EVOLUTION OF SURFACE CNO ABUNDANCES IN MASSIVE STARS.  
Maeder A., Przybilla N., Nieva M.-F., Georgy C., Meynet G., Ekström S., and Eggenberger P.  
(2014) *A&A* **565** A39 – arXiv:1404.1020 [[ADS](#)]
- [55] ON THE EFFECT OF ROTATION ON POPULATIONS OF CLASSICAL CEPHEIDS I. PREDICTIONS AT SOLAR METALLICITY.  
Anderson R. I., Ekström S., Georgy C., Meynet G., Mowlavi N., and Eyer L.  
(2014) *A&A* **564** A100 – arXiv:1403.0809 [[ADS](#)]
- [56] THE EVOLUTION OF MASSIVE STARS AND THEIR SPECTRA I. A NON-ROTATING  $60 M_{\odot}$  STAR FROM THE ZERO-AGE MAIN SEQUENCE TO THE PRE-SUPERNOVA STAGE.  
Groh J.H., Meynet G., Ekström S., and Georgy C.  
(2014) *A&A* **564** A30 – arXiv:1401.7322 [[ADS](#)]
- [57] PROGENITORS OF SUPERNOVA IBC: A SINGLE WOLF-RAYET STAR AS THE POSSIBLE PROGENITOR OF THE SN IB IPTF13BVN.  
Groh J.H., Georgy C., and Ekström S.  
(2013) *A&A* **558** L1 – arXiv:1307.8434 [[ADS](#)]

- [58] FUNDAMENTAL PROPERTIES OF CORE-COLLAPSE SUPERNOVA AND GRB PROGENITORS: PREDICTING THE LOOK OF MASSIVE STARS BEFORE DEATH.  
Groh J.H., Meynet G., Georgy C., and Ekström S.  
(2013) *A&A* **558** A131 – arXiv:1308.4681 [ADS]
- [59] GRIDS OF STELLAR MODELS WITH ROTATION. III. MODELS FROM 0.8 TO 120  $M_{\odot}$  AT A METALLICITY  $Z = 0.002$ .  
Georgy C., Ekström S., Eggenberger P., Meynet G., Haemmerlé L., Maeder A., Granada A., Groh J.H., Hirschi R., Mowlavi N., Yusof N., Charbonnel C., Decressin T., and Barblan F.  
(2013) *A&A* **558** A103 – arXiv:1308.2914 [ADS]
- [60] EVOLUTION AND FATE OF VERY MASSIVE STARS.  
Yusof N., Hirschi R., Meynet G., Crowther P. A., Ekström S., Frischknecht U., Georgy C., Abu Kassim H., and Schnurr O.  
(2013) *MNRAS* **433** 1114 – arXiv:1305.2099 [ADS]
- [61] CLOSE-BINARY EVOLUTION. I. TIDALLY INDUCED SHEAR MIXING IN ROTATING BINARIES.  
Song H. F., Maeder A., Meynet G., Huang R. Q., Ekström S., and Granada A.  
(2013) *A&A* **556** A100 – arXiv:1306.6731 [ADS]
- [62] POPULATIONS OF ROTATING STARS. II. RAPID ROTATORS AND THEIR LINK TO BE-TYPE STARS.  
Granada A., Ekström S., Georgy C., Krtićka J., Owocki S., Meynet G., and Maeder A.  
(2013) *A&A* **553** A25 – arXiv:1303.2393 [ADS]
- [63] POPULATIONS OF ROTATING STARS. I. MODELS FROM 1.7 TO 15  $M_{\odot}$  AT  $Z = 0.014, 0.006, \text{ AND } 0.002$  WITH  $\Omega/\Omega_{crit}$  BETWEEN 0 AND 1.  
Georgy C., Ekström S., Granada A., Meynet G., Mowlavi N., Eggenberger P., and Maeder A.  
(2013) *A&A* **553** A24 – arXiv:1303.2321 [ADS]
- [64] MASSIVE STAR EVOLUTION: LUMINOUS BLUE VARIABLES AS UNEXPECTED SUPERNOVA PROGENITORS.  
Groh J.H., Meynet G., and Ekström S.  
(2013) *A&A* **550** L7 – arXiv:1301.1519 [ADS]
- [65] MODELS OF ROTATING MASSIVE STARS: IMPACTS OF VARIOUS PRESCRIPTIONS.  
Meynet G., Ekström S., Maeder A., Eggenberger P., Saio H., Chomienne V., and Haemmerlé L.  
in *Studying Stellar Rotation and Convection* (Goupil M., Belkacem K., Neiner C., Lignières F., and Green J. J., editors).  
(2013) *Lecture Notes in Physics* **865** 3 – arXiv:1301.2487 [ADS]
- [66] RESOLVING VEGA AND THE INCLINATION CONTROVERSY WITH CHARA/MIRC.  
Monnier J. D., Che X., Zhao M., Ekström S., Maestro V., Aufdenberg J., Baron F., Georgy C., Kraus S., McAlister H., Pedretti E., Ridgway S., Sturmann J., Sturmann L., ten Brummelaar T., Thureau N., Turner N., and Tuthill P. G.  
(2012) *ApJL* **761** L3 – arXiv:1211.6055 [ADS]
- [67] THERMOHALINE INSTABILITY AND ROTATION-INDUCED MIXING. III. GRID OF STELLAR MODELS AND ASYMPTOTIC ASTEROSEISMIC QUANTITIES FROM THE PRE-MAIN SEQUENCE UP TO THE AGB FOR LOW- AND INTERMEDIATE-MASS STARS OF VARIOUS METALLICITIES.  
Lagarde N., Decressin T., Charbonnel C., Eggenberger P., Ekström S., and Palacios A.  
(2012) *A&A* **543** A108 – arXiv:1204.5193 [ADS]
- [68] GRIDS OF STELLAR MODELS WITH ROTATION. II. WR POPULATIONS AND SUPERNOVAE/GRB PROGENITORS AT  $Z = 0.014$ .  
Georgy C., Ekström S., Meynet G., Massey P., Levesque E. M., Hirschi R., Eggenberger P., and Maeder A.  
(2012) *A&A* **542** A29 – arXiv:1203.5243 [ADS]
- [69] THE EFFECTS OF STELLAR ROTATION. I. IMPACT ON THE IONIZING SPECTRA AND INTEGRATED PROPERTIES OF STELLAR POPULATIONS.  
Levesque E. M., Leitherer C., Ekström S., Meynet G., and Schaerer D.  
(2012) *ApJ* **751** 67 – arXiv:1203.5109 [ADS]

- [70] STELLAR MASS AND AGE DETERMINATIONS. I. GRIDS OF STELLAR MODELS FROM  $Z = 0.006$  TO  $0.04$  AND  $M = 0.5$  TO  $3.5 M_{\odot}$ .  
Mowlavi N., Eggenberger P., Meynet G., Ekström S., Georgy C., Maeder A., Charbonnel C., and Eyer L.  
(2012) *A&A* **541** A41 – arXiv:1201.3628 [[ADS](#)]
- [71] ON THE EDDINGTON LIMIT AND WOLF-RAYET STARS.  
Maeder A., Georgy C., Meynet G., and Ekström S.  
(2012) *A&A* **539** A110 – arXiv:1201.5013 [[ADS](#)]
- [72] GRIDS OF STELLAR MODELS WITH ROTATION. I. MODELS FROM  $0.8$  TO  $120 M_{\odot}$  AT SOLAR METALLICITY ( $Z = 0.014$ ).  
Ekström S., Georgy C., Eggenberger P., Meynet G., Mowlavi N., Wyttenbach A., Granada A., Decressin T., Hirschi R., Frischknecht U., Charbonnel C., and Maeder A.  
(2012) *A&A* **537** A146 – arXiv:1110.5049 [[ADS](#)]
- [73] DIFFERENTIAL ROTATION IN RAPIDLY ROTATING EARLY-TYPE STARS. I. MOTIVATIONS FOR COMBINED SPECTROSCOPIC AND INTERFEROMETRIC STUDIES.  
Zorec J., Frémat Y., Domiciano de Souza A., Delaa O., Stee P., Mourard D., Cidale L., Martayan C., Georgy C., and Ekström S.  
(2011) *A&A* **526** A87 – arXiv:1012.1707 [[ADS](#)]
- [74] EVOLUTION OF MASSIVE BE AND OE STARS AT LOW METALLICITY TOWARDS THE LONG GAMMA RAY BURSTS.  
Martayan C., Zorec J., Baade D., Frémat Y., Fabregat J., and Ekström S.  
(2011) *BSRSL* **80** 285 – arXiv:1010.3345 [[ADS](#)]
- [75] CONSTRAINTS ON ROTATIONAL MIXING FROM SURFACE EVOLUTION OF LIGHT ELEMENTS IN MASSIVE STARS.  
Frischknecht U., Hirschi R., Meynet G., Ekström S., Georgy C., Rauscher T., Winteler C., and Thielemann F.-K.  
(2010) *A&A* **522** A39 – arXiv:1007.1779 [[ADS](#)]
- [76] ARE C-RICH ULTRA IRON-POOR STARS ALSO HE-RICH?  
Meynet G., Hirschi R., Ekström S., Maeder A., Georgy C., Eggenberger P., and Chiappini C.  
(2010) *A&A* **521** A30 – arXiv:1004.5024 [[ADS](#)]
- [77] CAN MASSIVE BE/OE STARS BE PROGENITORS OF LONG GAMMA RAY BURSTS?  
Martayan C., Zorec J., Frémat Y., and Ekström S.  
(2010) *A&A* **516** A103 – arXiv:1004.3362 [[ADS](#)]
- [78] EFFECTS OF THE VARIATION OF FUNDAMENTAL CONSTANTS ON POPULATION III STELLAR EVOLUTION.  
Ekström S., Coc A., Descouvemont P., Meynet G., Olive K. A., Uzan J.-P., and Vangioni E.  
(2010) *A&A* **514** A62 – arXiv:0911.2420 [[ADS](#)]
- [79] MODELING MASSIVE STARS WITH ROTATION: THE CASE OF NITROGEN ENRICHMENTS.  
Maeder A., Meynet G., Ekström S., and Georgy C.  
(2009) *CoAst* **158** 72 – arXiv:0810.0657 [[ADS](#)]
- [80] EVOLUTION OF MASSIVE STARS ALONG THE COSMIC HISTORY.  
Meynet G., Ekström S., Georgy C., Chiappini C., and Maeder A.  
in *Reviews in Modern Astronomy* (Röser S., editor).  
(2009) *Reviews in Modern Astronomy* **21** 97 – arXiv:0901.4489 [[ADS](#)]
- [81] DARK MATTER ANNIHILATIONS IN POPULATION III STARS.  
Taoso M., Bertone G., Meynet G., and Ekström S.  
(2008) *Phys. Rev. D* **78**(12) 123510 – arXiv:0806.2681 [[ADS](#)]
- [82] EFFECTS OF ROTATION ON THE EVOLUTION OF PRIMORDIAL STARS.  
Ekström S., Meynet G., Chiappini C., Hirschi R., and Maeder A.  
(2008) *A&A* **489** 685 – arXiv:0807.0573 [[ADS](#)]

- [83] THE GENEVA STELLAR EVOLUTION CODE.  
Eggenberger P., Meynet G., Maeder A., Hirschi R., Charbonnel C., Talon S., and Ekström S.  
(2008) *Ap&SS* **316** 43 [[ADS](#)]
- [84] A NEW IMPRINT OF FAST ROTATORS: LOW  $^{12}\text{C}/^{13}\text{C}$  RATIOS IN EXTREMELY METAL-POOR HALO STARS.  
Chiappini C., Ekström S., Meynet G., Hirschi R., Maeder A., and Charbonnel C.  
(2008) *A&A* **479** L9 – arXiv:0712.3434 [[ADS](#)]
- [85] EVOLUTION TOWARDS THE CRITICAL LIMIT AND THE ORIGIN OF BE STARS.  
Ekström S., Meynet G., Maeder A., and Barblan F.  
(2008) *A&A* **478** 467 – arXiv:0711.1735 [[ADS](#)]
- [86] FAST ROTATING MASSIVE STARS AND THE ORIGIN OF THE ABUNDANCE PATTERNS IN GALACTIC GLOBULAR CLUSTERS.  
Decressin T., Meynet G., Charbonnel C., Prantzos N., and Ekström S.  
(2007) *A&A* **464** 1029 – arXiv:astro-ph/0611379 [[ADS](#)]
- [87] A STRONG CASE FOR FAST STELLAR ROTATION AT VERY LOW METALLICITIES.  
Chiappini C., Hirschi R., Meynet G., Ekström S., Maeder A., and Matteucci F.  
(2006) *A&A* **449** L27 – arXiv:astro-ph/0602459 [[ADS](#)]
- [88] THE EARLY STAR GENERATIONS: THE DOMINANT EFFECT OF ROTATION ON THE CNO YIELDS.  
Meynet G., Ekström S., and Maeder A.  
(2006) *A&A* **447** 623 – arXiv:astro-ph/0510560 [[ADS](#)]

### Publications in conference proceedings

- [1] A NEW  $^{12}\text{C}+^{12}\text{C}$  REACTION RATE: IMPACT ON STELLAR EVOLUTION.  
Monprivat E., Choplin A., Martinet S., Courtin S., Heine M., Adsley P., Curien D., Dumont T., Ekström S., Jenkins D. G., Moukaddam M., Nippert J., Tsiatsiou S., and Meynet G.  
in *European Physical Journal Web of Conferences*.  
(2023) *European Physical Journal Web of Conferences* **279** 11016 [[ADS](#)]
- [2] USING LUMINOSITY FUNCTIONS TO DETERMINE THE MASS-LOSS RATES OF RED SUPERGIANTS.  
Massey Philip, Neugent Kathryn, and Ekstrom Sylvia.  
in *American Astronomical Society Meeting Abstracts*.  
(2023) *American Astronomical Society Meeting Abstracts* **55** 127.06 [[ADS](#)]
- [3] OPEN PROBLEMS IN HIGH-MASS STELLAR EVOLUTION.  
Ekström S., Meynet G., Georgy C., Hirschi R., Maeder A., Groh J., Eggenberger P., and Buldgen G.  
in *Stars and their Variability Observed from Space* (Neiner C., Weiss W. W., Baade D., Griffin R. E., Lovekin C. C., and Moffat A. F. J., editors).  
(2020) 223 [[ADS](#)]
- [4] SEARCHING FOR THE SIGNATURES OF PRESOLAR GRAINS IN MASSIVE STARS.  
Dwarkadas V. V., Dilmohamed S., Ekstrom S., Meynet G., Liu N., Meyer B., and Dauphas N.  
in *Lunar and Planetary Science Conference*.  
(2020) *Lunar and Planetary Science Conference* Lunar and Planetary Science Conference 2968 [[ADS](#)]
- [5] MASSIVE STAR EVOLUTION: FEEDBACKS IN LOW-Z ENVIRONMENT.  
Ekström Sylvia, Meynet Georges, Georgy Cyril, Groh José, Choplin Arthur, and Song Hanfeng.  
in *IAU Symposium* (McQuinn Kristen B. W. and Stierwalt Sabrina, editors).  
(2019) *IAU Symposium* **344** 153–160 [[ADS](#)]
- [6] WHAT YOUNG MASSIVE CLUSTERS IN THE MAGELLANIC CLOUDS TEACH US ABOUT OLD GALACTIC GLOBULAR CLUSTERS?  
D'Antona Francesca, Ventura Paolo, Dotter Aaron, Ekström Sylvia, and Tailo Marco.  
in *IAU Symposium* (Kerschbaum Franz, Groenewegen Martin, and Olofsson Hans, editors).  
(2019) *IAU Symposium* **343** 314–317 [[ADS](#)]

- [7] STELLAR ROTATION AND ITS IMPORTANCE IN THE INTERPRETATION OF STELLAR POPULATIONS IN MCS.  
Ekström Sylvia, Meynet Georges, Georgy Cyril, and Granada Anahí.  
(2018) *Memorie della Societa Astronomica Italiana* **89** 50 [[ADS](#)]
- [8] MASSIVE STARS: STELLAR MODELS AND STELLAR YIELDS, IMPACT ON GALACTIC ARCHAEOLOGY.  
Meynet G., Choplin A., Ekstroem S., and Georgy C.  
(2017) *IAUS 334 (in press)* – arXiv:1711.04554 [[ADS](#)]
- [9] MASSIVE STAR EVOLUTION: WHAT WE DO (NOT) KNOW.  
Georgy C., Hirschi R., and Ekström S.  
in *Second BRITE-Constellation Science Conference: Small Satellites - Big Science* (Zwintz Konstanze and Poretti Ennio, editors).  
(2017) 37 – arXiv:1612.05451 [[ADS](#)]
- [10] HOW ROTATION AFFECTS MASSES AND AGES OF CLASSICAL CEPHEIDS.  
Anderson R. I., Ekström S., Georgy C., Meynet G., and Saio H.  
in *European Physical Journal Web of Conferences*.  
(2017) *European Physical Journal Web of Conferences* **152** 06002 – arXiv:1703.01338 [[ADS](#)]
- [11] MASSIVE STARS, SUCCESSES AND CHALLENGES.  
Meynet G., Maeder A., Georgy C., Ekström S., Eggenberger P., Barblan F., and Song H. F.  
in *The Lives and Death-Throes of Massive Stars* (Eldridge J. J., Bray J. C., McClelland L. A. S., and Xiao L., editors).  
(2017) *IAU Symposium* **329** 3 – arXiv:1704.04616 [[ADS](#)]
- [12] SYNTHETIC CLUSTERS OF MASSIVE STARS TO TEST STELLAR EVOLUTION MODELS.  
Georgy C. and Ekström S.  
in *IAU Symposium* (Charbonnel C. and Nota A., editors).  
(2017) *IAU Symposium* **316** 355 – arXiv:1509.02779 [[ADS](#)]
- [13] THE ADVANCED STAGES OF STELLAR EVOLUTION: IMPACT OF MASS LOSS, ROTATION, AND LINK WITH B[E] STARS.  
Georgy C., Saio H., Ekström S., and Meynet G.  
in *The B[e] Phenomenon: Forty Years of Studies* (Miroshnichenko A., Zharikov S., Korčáková D., and Wolf M., editors).  
(2017) *Astronomical Society of the Pacific Conference Series* **508** 99 – arXiv:1610.07332 [[ADS](#)]
- [14] CRITICALLY ROTATING POST-MAIN SEQUENCE STARS HOSTING A VISCOUS DECRETION DISK.  
Granada A., Sigut A., Jones C., Georgy C., Ekström S., and Meynet G.  
in *The B[e] Phenomenon: Forty Years of Studies* (Miroshnichenko A., Zharikov S., Korčáková D., and Wolf M., editors).  
(2017) *Astronomical Society of the Pacific Conference Series* **508** 81 [[ADS](#)]
- [15] INSIGHTS ON THE FIRST STARS FROM CEMP-NO STARS.  
Choplin A., Meynet G., Maeder A., Hirschi R., Ekström S., and Chiappini C.  
in *14th International Symposium on Nuclei in the Cosmos (NIC2016)* (Kubono S., Kajino T., Nishimura S., Isobe T., Nagataki S., Shima T., and Takeda Y., editors).  
(2017) 020202 [[ADS](#)]
- [16] EVOLUTION AND NUCLEOSYNTHESIS OF MASSIVE STARS.  
Meynet G., Maeder A., Choplin A., Takahashi K., Ekström S., Hirschi R., Chiappini C., and Eggenberger P.  
in *14th International Symposium on Nuclei in the Cosmos (NIC2016)* (Kubono S., Kajino T., Nishimura S., Isobe T., Nagataki S., Shima T., and Takeda Y., editors).  
(2017) 010401 [[ADS](#)]
- [17] EVOLUTION OF INTERMEDIATE-MASS ROTATING STELLAR POPULATIONS: ROTATIONAL PROPERTIES, NITROGEN SURFACE ABUNDANCES, AND THEIR LINK TO THE BE-PHENOMENON.  
Granada A., Georgy C., Haemmerlé L., Ekström S., and Meynet G.  
in *Bright Emissaries: Be Stars as Messengers of Star-Disk Physics* (Sigut T. A. A. and Jones C. E., editors).  
(2016) *Astronomical Society of the Pacific Conference Series* **506** 33 [[ADS](#)]

- [18] CLUES ON THE FIRST STARS FROM CEMP-NO STARS.  
Choplin A., Meynet G., Maeder A., Hirschi R., Ekström S., and Chiappini C.  
in *The General Assembly of Galaxy Halos: Structure, Origin and Evolution* (Bragaglia A., Arnaboldi M., Rejkuba M., and Romano D., editors).  
(2016) *IAU Symposium* 317 282 [[ADS](#)]
- [19] CONSTRAINING STELLAR EVOLUTION MODELS WITH OBSERVATIONS.  
Ekström S., Georgy C., Meynet G., and Groh J.  
(2015) *EAS Publications Series* 71 47 [[ADS](#)]
- [20] MASS LOSS OF RED SUPERGIANTS: A KEY INGREDIENT FOR THE FINAL EVOLUTION OF MASSIVE STARS.  
Georgy C. and Ekström S.  
(2015) *EAS Publications Series* 71 41 – arXiv:1508.04656 [[ADS](#)]
- [21] RSG POPULATIONS AT VARIOUS METALLICITIES.  
Ekström S., Georgy C., Meynet G., Groh J., and Granada A.  
(2015) *IAU General Assembly* 22 2256857 [[ADS](#)]
- [22] SYNTHETIC CLUSTERS OF MASSIVE STARS TO TEST STELLAR EVOLUTION MODELS.  
Georgy C., Ekström S., Granada A., Meynet G., Bastian N., and Charbonnel C.  
(2015) *IAU General Assembly* 22 2256844 [[ADS](#)]
- [23] THE LUMINOSITY DISTRIBUTION OF RSGs TO TEST THEIR MASS-LOSS RATE.  
Georgy C., Ekström S., Hirschi R., Meynet G., Massey P., and Groh J.  
(2015) *IAU General Assembly* 22 2256831 [[ADS](#)]
- [24] SUPERNOVA PROGENITORS AS A TEST FOR STELLAR PHYSICS.  
Georgy C., Ekström S., Hirschi R., Saio H., and Meynet G.  
(2015) *IAU General Assembly* 22 2256814 [[ADS](#)]
- [25] EXPECTED PROPERTIES OF YOUNG STELLAR CLUSTERS AT DIFFERENT METALLICITIES.  
Ekström S., Georgy C., Meynet G., Groh J., and Granada A.  
(2015) *IAU General Assembly* 22 2256812 [[ADS](#)]
- [26] CLUES ABOUT THE FIRST STARS FROM CEMP-NO STARS.  
Meynet G., Maeder A., Choplin A., Hirschi R., Ekström S., and Chiappini C.  
(2015) *IAU General Assembly* 22 2255377 [[ADS](#)]
- [27] ROTATION AND THE CEPHEID MASS DISCREPANCY.  
Anderson R. I., Ekström S., Georgy C., Meynet G., Mowlavi N., and Eyer L.  
in *New Windows on Massive Stars* (Meynet G., Georgy C., Groh J., and Stee P., editors).  
(2015) *IAU Symposium* 307 206–207 – arXiv:1408.2769 [[ADS](#)]
- [28] REVISITING THE HUNTER DIAGRAM WITH THE GENEVA STELLAR EVOLUTION CODE.  
Simoniello R., Meynet G., Ekström S., Georgy C., and Granada A.  
in *New Windows on Massive Stars* (Meynet G., Georgy C., Groh J., and Stee P., editors).  
(2015) *IAU Symposium* 307 142–143 [[ADS](#)]
- [29] EVOLUTION OF THE ROTATIONAL PROPERTIES AND NITROGEN SURFACE ABUNDANCES OF B-TYPE STELLAR POPULATIONS.  
Granada A., Meynet G., Ekström S., Georgy C., and Haemmerlé L.  
in *New Windows on Massive Stars* (Meynet G., Georgy C., Groh J., and Stee P., editors).  
(2015) *IAU Symposium* 307 102 [[ADS](#)]
- [30] WOLF-RAYET STARS AS AN EVOLVED STAGE OF STELLAR LIFE.  
Georgy C., Ekström S., Hirschi R., Meynet G., Groh J. H., and Eggenberger P.  
in *Wolf-Rayet Stars: Proceedings of an International Workshop* (Hamann W.-R., Sander A., and Todt H., editors).  
(2015) 229. Universitätsverlag Potsdam – arXiv:1508.04650 [[ADS](#)]

- [31] PHYSICS OF MASSIVE STARS RELEVANT FOR THE MODELING OF WOLF-RAYET POPULATIONS.  
Meynet G., Georgy C., Maeder A., Ekström S., Groh J. H., Barblan F., Song H. F., and Eggenberger P.  
in *Wolf-Rayet Stars: Proceedings of an International Workshop* (Hamann W.-R., Sander A., and Todt H., editors).  
(2015) 183. Universitätsverlag Potsdam [[ADS](#)]
- [32] NUCLEAR AND GRAVITATIONAL ENERGIES IN STARS.  
Meynet G., Courvoisier T., and Ekström S.  
(2014) *AIPC* **1595** 32 – arXiv:1312.4441 [[ADS](#)]
- [33] FOUR OPEN QUESTIONS IN MASSIVE STAR EVOLUTION.  
Meynet G., Eggenberger P., Ekström S., Georgy C., Groh J., Maeder A., Saio H., and Moriya T.  
in *EAS Publications Series* (Alecian G., Lebreton Y., Richard O., and Vauclair G., editors).  
(2013) *EAS Publications Series* **63** 373–383 – arXiv:1308.5797 [[ADS](#)]
- [34] INFLUENCE OF THE VARIATION OF FUNDAMENTAL CONSTANTS AND THE ROLE OF THE A=8 NUCLEUS IN BBN.  
Coc A., Vangioni E., Uzan J.-P., Olive K., Descouvemont P., Goriely S., Ekström S., and Meynet G.  
in *Varying Fundamental Constants and Dynamical Dark Energy*.  
(2013) 23 [[ADS](#)]
- [35] EFFECTS OF ROTATION ON STELLAR EVOLUTION.  
Eggenberger P., Charbonnel C., Ekström S., Georgy C., Haemmerlé L., Lagarde N., Maeder A., Meynet G., Miglio A., and Montalbán J.  
in *Asteroseismology of Stellar Populations in the Milky Way*.  
(2013) 7 [[ADS](#)]
- [36] WOLF-RAYET, YELLOW AND RED SUPERGIANT IN THE SINGLE MASSIVE STARS PERSPECTIVE.  
Georgy C., Hirschi R., Ekström S., and Meynet G.  
in *Massive Stars: From alpha to Omega*.  
(2013) 117 [[ADS](#)]
- [37] THE EVOLUTION OF RAPIDLY ROTATING B-TYPE STELLAR POPULATIONS.  
Granada A., Georgy C., Ekström S., Meynet G., and Haemmerlé L.  
in *Massive Stars: From alpha to Omega*.  
(2013) 38 [[ADS](#)]
- [38] EVOLUTIONARY MODELS FOR SINGLE MASSIVE STARS.  
Ekström S.  
in *Massive Stars: From alpha to Omega*.  
(2013) 37 [[ADS](#)]
- [39] THE EVOLUTION OF RED SUPERGIANTS AT VERY LOW METALLICITY.  
Groh J. H., Meynet G., Ekström S., Eggenberger P., Georgy C., Granada A., and Heap S.  
in *The Physics of Red Supergiants: Recent Advances and Open Questions* (Kervella P., Le Bertre T., and Perrin G., editors).  
(2013) *EAS Publications Series* **60** 51 [[ADS](#)]
- [40] HOW THE MASS-LOSS RATES OF RED-SUPERGIANTS DETERMINE THE FATE OF MASSIVE STARS?  
Georgy C., Ekström S., Saio H., Meynet G., Groh J., and Granada A.  
in *The Physics of Red Supergiants: Recent Advances and Open Questions* (Kervella P., Le Bertre T., and Perrin G., editors).  
(2013) *EAS Publications Series* **60** 43 – arXiv:1301.2978 [[ADS](#)]
- [41] RED SUPERGIANTS AND STELLAR EVOLUTION.  
Ekström S., Georgy C., Meynet G., Groh J.H., and Granada A.  
in *The Physics of Red Supergiants: Recent Advances and Open Questions* (Kervella P., Le Bertre T., and Perrin G., editors).  
(2013) *EAS Publications Series* **60** 31 – arXiv:1303.1629 [[ADS](#)]



- [42] THE PAST AND FUTURE EVOLUTION OF A STAR LIKE BETELGEUSE.  
Meynet G., Haemmerlé L., Ekström S., Georgy C., Groh J., and Maeder A.  
in *The Physics of Red Supergiants: Recent Advances and Open Questions* (Kervella P., Le Bertre T., and Perrin G., editors).  
(2013) *EAS Publications Series* **60** 17 – arXiv:1303.1339 [[ADS](#)]
- [43] THERMOHALINE INSTABILITY AND ROTATION-INDUCED MIXING IN LOW AND INTERMEDIATE MASS STARS: CONSEQUENCES ON GLOBAL ASTEROSEISMIC QUANTITIES.  
Lagarde N., Eggenberger P., Charbonnel C., Decressin T., Ekström S., and Palacios A.  
(2013) *European Physical Journal Web of Conferences* **43** 01006 [[ADS](#)]
- [44] STELLAR EVOLUTION AND OBSERVATIONAL PROPERTIES OF SN PROGENITORS FROM MASSIVE STARS.  
Groh J., Meynet G., Ekstrom S., and Georgy C.  
in *GRBs and their Hosts as Tracers of the High Redshift Universe*.  
(2013) 16 [[ADS](#)]
- [45] STELLAR ROTATION AND ITS IMPACT ON THE IONIZING SPECTRA OF GALAXIES.  
Levesque E. M., Leitherer C., Ekström S., Meynet G., and Schaerer D.  
(2013) *AAS Meeting Abstracts* **221** 414.01 [[ADS](#)]
- [46] DISKS SURROUNDING BE STARS: A STELLAR EVOLUTION PERSPECTIVE.  
Granada A., Ekström S., Georgy C., Meynet G., Krtićka J., and Owocki S. P.  
in *Circumstellar Dynamics at High Resolution* (Carciofi A. C. and Rivinius T., editors).  
(2012) *ASPC* **464** 117 [[ADS](#)]
- [47] POPULATION SYNTHESIS AT THE CROSSROADS.  
Leitherer C. and Ekström S.  
(2012) *IAU Symposium* **284** 2 – arXiv:1111.5204 [[ADS](#)]
- [48] FEEDING A DISK: THE MECHANICAL MASS LOSS OF BE STARS FROM A NUMERICAL POINT OF VIEW.  
Ekström S., Georgy C., Granada A., Wyttenbach A., and Meynet G.  
in *Advances in Computational Astrophysics: Methods, Tools, and Outcome* (Capuzzo-Dolcetta R., Limongi M., and Tornambè A., editors).  
(2012) *ASPC* **453** 353 [[ADS](#)]
- [49] MASSIVE BE AND OE STARS AT LOW METALLICITY AND LONG GAMMA RAY BURSTS.  
Martayan C., Zorec J., Baade D., Frémat Y., Ekström S., and Fabregat J.  
(2012) *MemSAI* **21** 34 – arXiv:1110.3244 [[ADS](#)]
- [50] EQUATORIAL MASS LOSS FROM BE STARS.  
Georgy C., Ekström S., Granada A., and Meynet G.  
in *Active OB Stars: Structure, Evolution, Mass Loss, and Critical Limits* (Neiner C., Wade G., Meynet G., and Peters G., editors).  
(2011) *IAU Symposium* **272** 640–641 – arXiv:1010.1019 [[ADS](#)]
- [51] MASSIVE OE/BE STARS AT LOW METALLICITY: CANDIDATE PROGENITORS OF LONG GRBs?  
Martayan C., Baade D., Zorec J., Frémat Y., Fabregat J., and Ekström S.  
in *Active OB Stars: Structure, Evolution, Mass Loss, and Critical Limits* (Neiner C., Wade G., Meynet G., and Peters G., editors).  
(2011) *IAU Symposium* **272** 300 – arXiv:1010.3343 [[ADS](#)]
- [52] MASSIVE STELLAR MODELS: ROTATIONAL EVOLUTION, METALLICITY EFFECTS.  
Ekström S., Georgy C., Meynet G., Maeder A., and Granada A.  
in *Active OB stars – structure, evolution, mass loss, and critical limits* (Neiner C., Wade G., Meynet G., and Peters G., editors).  
(2011) *IAU Symposium* **272** 62 – arXiv:1010.3838 [[ADS](#)]
- [53] CONSTRAINTS ON THE VARIATIONS OF FUNDAMENTAL COUPLINGS BY STELLAR MODELS.  
Coc A., Ekström S., Descouvemont P., and Vangioni E.  
(2010) *Highlights of Astronomy* **15** 306 [[ADS](#)]

- [54] EFFECTS OF THE VARIATION OF FUNDAMENTAL CONSTANTS ON POP III STELLAR EVOLUTION.  
Coc A., Ekström S., Descouvemont P., Meynet G., Uzan J.-P., and Vangioni E.  
in *AIPC* (Tanihara I., Ong H. J., Tamii A., Kishimoto T., Kajino T., Kubono S., and Shima T., editors).  
(2010) *AIPC* **1269** 21 – arXiv:0911.2420 [[ADS](#)]
- [55] THE PROGENITORS OF SUPERNOVAE AT VARIOUS METALLICITIES.  
Georgy C., Meynet G., Ekström S., Maeder A., Walder R., Folini D., and Hirschi R.  
in *Progenitors and Environments of Stellar Explosions*.  
(2010) *IAP Coll.* **XXVI** 15 [[ADS](#)]
- [56] PROGENITORS OF CC SNE FROM SINGLE ROTATING MASSIVE STAR MODELS.  
Meynet G., Georgy C., Hirschi R., Maeder A., Massey P., Przybilla N., Eggenberger P., and Ekström S.  
in *Progenitors and Environments of Stellar Explosions*.  
(2010) *IAP Coll.* **XXVI** 14 [[ADS](#)]
- [57] STELLAR EVOLUTION IN THE UPPER HR DIAGRAM.  
Hirschi R., Meynet G., Maeder A., Ekström S., and Georgy C.  
in *Hot and Cool: Bridging Gaps in Massive Star Evolution* (Leitherer C., Bennett P. D., Morris P. W., and Van Loon J. T., editors).  
(2010) *ASPC* **425** 13 [[ADS](#)]
- [58] THEORETICAL STELLAR  $\Delta Y / \Delta O$  IN THE EARLY UNIVERSE.  
Ekström S., Meynet G., Maeder A., Chiappini C., Georgy C., and Hirschi R.  
in *Light Elements in the Universe* (Charbonnel C., Tosi M., Primas F., and Chiappini C., editors).  
(2010) *IAU Symposium* **268** 447 [[ADS](#)]
- [59] BORON DEPLETION IN 9 TO 15  $M_{\odot}$  STARS WITH ROTATION.  
Frischknecht U., Hirschi R., Meynet G., Ekström S., Georgy C., Rauscher T., Winteler C., and Thielemann F.-K.  
in *Light Elements in the Universe* (Charbonnel C., Tosi M., Primas F., and Chiappini C., editors).  
(2010) *IAU Symposium* **268** 421 [[ADS](#)]
- [60] WHAT HELIUM AND LITHIUM CAN TELL US ABOUT CEMP STARS?  
Meynet G., Hirschi R., Ekström S., Maeder A., Georgy C., Eggenberger P., and Chiappini C.  
in *Light Elements in the Universe* (Charbonnel C., Tosi M., Primas F., and Chiappini C., editors).  
(2010) *IAU Symposium* **268** 141 [[ADS](#)]
- [61] NUCLEOSYNTHESIS IN ROTATING MASSIVE STARS AND ABUNDANCES IN THE EARLY GALAXY.  
Meynet G., Hirschi R., Ekström S., Maeder A., Georgy C., Eggenberger P., and Chiappini C.  
in *Chemical Abundances in the Universe: Connecting First Stars to Planets* (Cunha K., Spite M., and Barbay B., editors).  
(2010) *IAU Symposium* **265** 98–105 – arXiv:0910.3856 [[ADS](#)]
- [62] MODELS OF STARS ROTATING NEAR THE CRITICAL LIMIT.  
Meynet G., Georgy C., Revaz Y., Walder R., Ekström S., and Maeder A.  
in *Revista Mexicana de Astronomia y Astrofisica Conference Series*.  
(2010) *Revista Mexicana de Astronomia y Astrofisica Conference Series* **38** 113–116 – arXiv:0910.3853 [[ADS](#)]
- [63] HUNTING FOR THE IMPRINTS OF THE FIRST STARS.  
Chiappini C., Ekström S., Meynet G., Hirschi R., and Maeder A.  
(2009) *Revista Mexicana de Astronomia y Astrofisica Conference Series* **35** 207 [[ADS](#)]
- [64] THE BASIC ROLE OF MAGNETIC FIELDS IN STELLAR EVOLUTION.  
Maeder A., Meynet G., Georgy C., and Ekström S.  
in *Cosmic Magnetic Fields: From Planets, to Stars and Galaxies* (Strassmeier K. G., Kosovichev A. G., and Beckman J. E., editors).  
(2009) *IAU Symposium* **259** 311 – arXiv:0812.2764 [[ADS](#)]
- [65] STELLAR EVOLUTION MODELS AT THE MAGELLANIC CLOUD METALLICITIES.  
Hirschi R., Ekström S., Georgy C., Meynet G., and Maeder A.

- in *The Magellanic System: Stars, Gas, and Galaxies* (Van Loon J. T. and Oliveira J. M., editors).  
(2009) *IAU Symposium* **256** 337 [[ADS](#)]
- [66] EVOLUTION AND CHEMICAL AND DYNAMICAL EFFECTS OF HIGH-MASS STARS.  
Meynet G., Chiappini C., Georgy C., Pignatari M., Hirschi R., Ekström S., and Maeder A.  
in *The Galaxy Disk in Cosmological Context* (Andersen J., Nordströara , m B., and Bland-Hawthorn J., editors).  
(2009) *IAU Symposium* **254** 325–336 – arXiv:0810.0652 [[ADS](#)]
- [67] CONSTRAINTS ON THE VARIATIONS OF FUNDAMENTAL COUPLINGS BY STELLAR MODELS .  
Coc A., Ekström S., Descouvemont P., Meynet G., Olive K. A., Uzan J.-P., and Vangioni E.  
(2009) *MemSAI* **80** 809 [[ADS](#)]
- [68] STELLAR EVOLUTION IN THE EARLY UNIVERSE.  
Hirschi R., Frischknecht U., Thielemann F.-K., Pignatari M., Chiappini C., Ekström S., Meynet G., and Maeder A.  
in *Low-Metallicity Star Formation: From the First Stars to Dwarf Galaxies* (Hunt L. K., Madden S. C., and Schneider R., editors).  
(2008) *IAU Symposium* **255** 297–304 – arXiv:0808.3723 [[ADS](#)]
- [69] POWERFUL EXPLOSIONS AT  $Z = 0$ ?  
Ekström S., Meynet G., Hirschi R., and Maeder A.  
in *Low-Metallicity Star Formation: from the First Stars to Dwarf Galaxies* (Hunt L. K., Madden S. C., and Schneider R., editors).  
(2008) *IAU Symposium* **255** 194 – arXiv:0807.5050 [[ADS](#)]
- [70] MASSIVE STAR EVOLUTION: FROM THE EARLY TO THE PRESENT DAY UNIVERSE.  
Meynet G., Ekström S., Georgy C., Maeder A., and Hirschi R.  
in *The Art of Modeling Stars in the 21st Century* (Deng L. and Chan K. L., editors).  
(2008) *IAU Symposium* **252** 317 – arXiv:0806.4063 [[ADS](#)]
- [71] STELLAR EVOLUTION AT LOW METALLICITY.  
Hirschi R., Chiappini C., Meynet G., Maeder A., and Ekström S.  
in *Massive Stars as Cosmic Engines* (Bresolin F., Crowther P. A., and Puls J., editors).  
(2008) *IAU Symposium* **250** 217 – arXiv:0802.1675 [[ADS](#)]
- [72] CAN VERY MASSIVE STARS AVOID PAIR-INSTABILITY SUPERNOVAE?  
Ekström S., Meynet G., and Maeder A.  
in *Massive Stars as Cosmic Engines* (Bresolin F., Crowther P.A., and Puls J., editors).  
(2008) *IAU Symposium* **250** – ArXiv:0801.3397 [[ADS](#)]
- [73] DEVELOPMENTS IN PHYSICS OF MASSIVE STARS.  
Meynet G., Ekström S., Maeder A., Hirschi R., Georgy C., and Beffa C.  
in *Massive Stars as Cosmic Engines* (Bresolin F., Crowther P. A., and Puls J., editors).  
(2008) *IAU Symposium* **250** 147 – arXiv:0802.2805 [[ADS](#)]
- [74] MASSIVE STARS AS COSMIC ENGINES THROUGH THE AGES.  
Maeder A., Meynet G., Ekström S., Hirschi R., and Georgy C.  
in *Massive Stars as Cosmic Engines* (Bresolin F., Crowther P. A., and Puls J., editors).  
(2008) *IAU Symposium* **250** 3 – arXiv:0801.4712 [[ADS](#)]
- [75] WERE THE FIRST STARS FAST ROTATORS?  
Chiappini C., Ekström S., Meynet G., Maeder A., and Hirschi R.  
in *First Stars III* (O’Shea B. W. and Heger A., editors).  
(2008) *AIPC* **990** 325 [[ADS](#)]
- [76] CAN VERY MASSIVE STARS AVOID PAIR-INSTABILITY SUPERNOVAE?  
Ekström S., Meynet G., and Maeder A.  
in *First Stars III* (O’Shea B. W. and Heger A., editors).  
(2008) *AIPC* **990** 220 – arXiv:0709.0202 [[ADS](#)]

- [77] SPINSTARS AT LOW METALLICITIES.  
Meynet G., Ekström S., Maeder A., Hirschi R., Chiappini C., and Georgy C.  
in *First Stars III* (O'Shea B. W. and Heger A., editors).  
(2008) *AIPC* 990 212 – arXiv:0709.2275 [[ADS](#)]
- [78] WIMPS ANNIHILATIONS IN POP III STARS.  
Taoso M., Bertone G., Meynet G., and Ekström S.  
in *Identification of Dark Matter 2008*.  
(2008) 76 [[ADS](#)]
- [79] NUCLEI IN GLOBULAR CLUSTERS - A LONG-STANDING PROBLEM REVISITED.  
Charbonnel C., Decressin T., Meynet G., Prantzos N., and Ekström S.  
in *From Stars to Galaxies: Building the Pieces to Build Up the Universe* (Vallenari A., Tantaló R., Portinari L., and Moretti A., editors).  
(2007) *ASPC* 374 163 [[ADS](#)]
- [80] STELLAR EVOLUTION WITH ROTATION: TOWARD THE FIRST STARS.  
Maeder A., Meynet G., and Ekström S.  
in *From Stars to Galaxies: Building the Pieces to Build Up the Universe* (Vallenari A., Tantaló R., Portinari L., and Moretti A., editors).  
(2007) *ASPC* 374 13 [[ADS](#)]
- [81] MASS LOSS AND VERY LOW-METALLICITY STARS.  
Hirschi R., Chiappini C., Meynet G., Ekström S., and Maeder A.  
in *Unsolved Problems in Stellar Physics: A Conference in Honor of Douglas Gough* (Stancliffe R. J., Houdek G., Martin R. G., and Tout C. A., editors).  
(2007) *AIPC* 948 397 – arXiv:0709.1886 [[ADS](#)]
- [82] INITIAL CONDITIONS FOR REACHING CRITICAL VELOCITY.  
Meynet G., Ekström S., Maeder A., and Barblan F.  
in *Active OB-Stars: Laboratories for Stellare and Circumstellar Physics* (Okazaki A. T., Owocki S. P., and Stefl S., editors).  
(2007) *ASPC* 361 325 [[ADS](#)]
- [83] EVOLUTION OF THE FIRST STELLAR GENERATIONS.  
Hirschi R., Maeder A., Meynet G., Chiappini C., and Ekström S.  
in *EAS Publications Series* (Emsellem E., Wozniak H., Massacrier G., Gonzalez J.-F., Devriendt J., and Champavert N., editors).  
(2007) *EAS Publications Series* 24 263 – astro-ph/0610741 [[ADS](#)]
- [84] EFFECTS OF ROTATION ON MASS LOSS FOR POPULATION III STARS.  
Ekström S., Meynet G., and Maeder A.  
in *Stellar Evolution at Low Metallicity: Mass Loss, Explosions, Cosmology* (Lamers H. J. G. L. M., Langer N., Nugis T., and Annuk K., editors).  
(2006) *ASPC* 353 141 – astro-ph/0511080 [[ADS](#)]
- [85] EVOLUTION OF ROTATING STARS AT VERY LOW METALLICITY.  
Meynet G., Hirschi R., Ekström S., and Maeder A.  
in *Stellar Evolution at Low Metallicity: Mass Loss, Explosions, Cosmology* (Lamers H. J. G. L. M., Langer N., Nugis T., and Annuk K., editors).  
(2006) *ASPC* 353 49 – astro-ph/0511446 [[ADS](#)]
- [86] CNO PRODUCTION IN THE FIRST GENERATION STARS.  
Ekström S., Meynet G., and Maeder A.  
in *International Symposium on Nuclear Astrophysics - Nuclei in the Cosmos*.  
(2006) – astro-ph/0610310 [[ADS](#)]
- [87] THE IMPACT OF STELLAR ROTATION ON THE CNO ABUNDANCE PATTERNS IN THE MILKY WAY AT LOW METALLICITIES.  
Chiappini C., Hirschi R., Matteucci F., Meynet G., Ekström S., and Maeder A.

in *Nuclei in the Cosmos*.  
(2006) [[ADS](#)]

- [88] MASS LOSS AT VERY LOW METALLICITY: IMPACTS ON NUCLEOSYNTHESIS AND GRB PROGENITORS.  
Meynet G., Maeder A., Hirschi R., Ekstrom S., and Chiappini C.  
in *International Symposium on Nuclear Astrophysics - Nuclei in the Cosmos*.  
(2006) 15.1 [[ADS](#)]
- [89] NUCLEOSYNTHESIS FROM MASSIVE ROTATING STARS.  
Meynet G., Hirschi R., Maeder A., and Ekström S.  
in *EAS Publications Series* (Montmerle T. and Kahane C., editors).  
(2006) *EAS Publications Series* 19 85 [[ADS](#)]
- [90] MASSIVE ROTATING STARS AT VERY LOW METALLICITY.  
Meynet G., Ekström S., and Maeder A.  
in *Chemical Abundances and Mixing in Stars in the Milky Way and its Satellites* (Randich S. and Pasquini L., editors).  
(2006) 314 [[ADS](#)]
- [91] ROTATIONAL MIXING IN MASSIVE STARS AND ITS MANY CONSEQUENCES.  
Maeder A., Meynet G., Hirschi R., and Ekström S.  
in *Chemical Abundances and Mixing in Stars in the Milky Way and its Satellites* (Randich S. and Pasquini L., editors).  
(2006) 308 [[ADS](#)]
- [92] EVOLUTION AT VERY LOW AND ZERO Z.  
Meynet G., Maeder A., and Ekström S.  
in *The Fate of the Most Massive Stars* (Humphreys R. and Stanek K., editors).  
(2005) *ASPC* 332 232 – astro-ph/0408322 [[ADS](#)]
- [93] FAST ROTATING FIRST STARS.  
Ekström S., Meynet G., and Maeder A.  
in *From Lithium to Uranium: Elemental Tracers of Early Cosmic Evolution* (Hill V., Francois P., and Primas F., editors).  
(2005) *IAU Symposium* 228 163 [[ADS](#)]
- [94] EVOLUTION OF THE FIRST STARS: THE MAJOR ROLE OF ROTATION FOR MIXING AND MASS LOSS.  
Maeder A., Meynet G., and Ekström S.  
in *From Lithium to Uranium: Elemental Tracers of Early Cosmic Evolution* (Hill V., Francois P., and Primas F., editors).  
(2005) *IAU Symposium* 228 157 [[ADS](#)]
- [95] EVOLUTION OF THE FIRST STARS: CNO YIELDS AND THE C-RICH EXTREMELY METAL POOR STARS.  
Meynet G., Ekström S., and Maeder A.  
in *From Lithium to Uranium: Elemental Tracers of Early Cosmic Evolution* (Hill V., Francois P., and Primas F., editors).  
(2005) *IAU Symposium* 228 141–150 – astro-ph/0511074 [[ADS](#)]

### Book chapters

- [1] Massive star evolution: Binaries as two single stars in *The impact of binary stars on stellar evolution* (Boffin H.M.J. and Beccari G., editors) page 128.  
Cambridge University Press (2019)
- [2] contributions in chapters 3, 4, and 13 in *L'évolution : de l'univers aux sociétés. Objets et concepts* (Gargaud M. and Lecointre G., editors).  
Ed. Matériologiques (2015)
- [3] eight entries in *Encyclopedia of Astrobiology* (Gargaud M., Amils R., Cernicharo Quintilla J., Cleaves H.J., Irvine W.M., Pinti D., and Viso M., editors).  
Springer Verlag (2011)

---

June 22, 2023