McGill Computational Science and Engineering Seminar

Friday November 17th at 14:00 in Burnside Hall room 1205

Recent Results on the Lambert W Function

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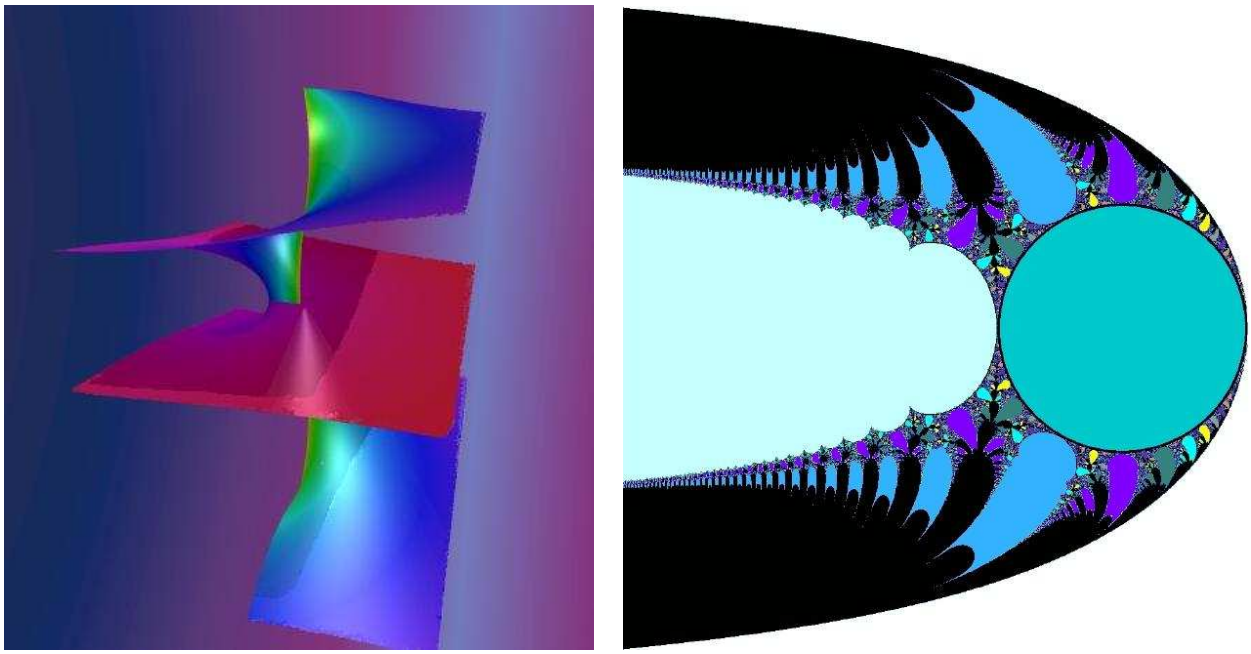
The solution of the equation $w\exp(w) = z$ occurs in a great many applications. This is because the equation is so very simple. The main applications include the study of the stability of delay differential equations, and quite independently the analysis of certain algorithms. In this talk I give a brief overview of the history of this function (which gives a kind of tour of undergraduate mathematics from a slightly different perspective) and present some recent results. With a little luck, I will be able to hand out copies of a poster on this function by the time I give this talk.



A portion of the Riemann Surface for the Lambert W function (left), and a picture representing parameters giving rise to attractive cycles of differing lengths in a recurrence relation for the infinite exponential $z^{z^{z^{z^{\cdot^{\cdot^{\cdot}}}}}}$.

Coffee and desserts are served after the seminar at 15:00 in the lounge, Burnside Hall 1024