

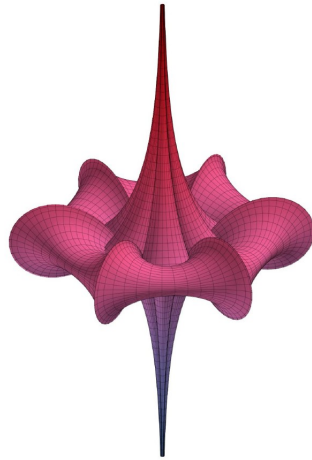
Special Topics in **Symbolic Computations**

CPSC 689–605

Class schedule: Tuesday and Thursday, 02:20pm–03:35pm

Room: ZACH 105B

Instructor: Dr. Gabriel Dos Reis



This course will familiarize students with exact and hybrid computations arising in the area of scientific software, compiler construction, engineering, etc. It will explore the principles and applications of contemporary computer algebra systems (*e.g.* Maple, Mathematica, OpenAxiom, MuPAD, etc.), based on recent developments.

Topics covered include: introduction to a symbolic computation system, applications of polynomial systems, computations with algebraic numbers, algorithmic differentiation, application problems (*e.g.* robotics, compiler optimizations, computer-aided-design, molecular structures, etc.)

<http://courses.cs.tamu.edu/gdr/>