## 1117-05-542

Vijay Jung Kunwar<sup>\*</sup> (vijay.kunwar@asurams.edu), 504 College Drive, Albany, GA 31705, and Mark van Hoeij (hoeij@math.fsu.edu), 1017 Academic Way, Tallahassee, FL 32306. On Completeness of the Table of Belyi maps with Five Exceptional Points.

Belyi maps play a crucial role on finding hypergeometric solutions of linear differential equations. Such maps ramify only above 0,1, and infinity. This property gives us a way to compute all Belyi maps (up to Mobius transformation) with n exceptional points. A complete table of such Belyi maps can be used to develop a differential solver to solve a class of linear differential equations with n regular singularities.

In this presentation, we will explain the completeness of the table of Belyi maps with five exceptional points using the 1-1 correspondence between Belyi maps (up to Mobius transformation), dessin d'enfants (up to homeomorphism), and 3-constellations (up to conjugation). (Received January 19, 2016)