SPEAKER: Chris Marks (University of Alberta, Canada)

TITLE: Second Order Fuchsian Equations and the Bounded Denominator Conjecture for Vector-Valued Modular Forms

ABSTRACT: I will state a new theorem about modular differential equations of order two, explain briefly how this result can be used to probe the bounded denominator conjecture for vector-valued modular forms, and give some new results obtained in this manner (e.g. a proof that generators of function fields of the Fermat curves associated to noncongruence subgroups of  $\Gamma(2)$  have unbounded denominators).