Abstract

We begin by reviewing some definitions and properties of the ring of Hurwitz series. Given a commutative ring with identity $A$, the ring of Hurwitz series over $A$ can be thought of as consisting of all sequences $(a_n)$ with entries $a_n$ in $A$. This set $HA$ of all sequences in $A$ can be given a natural addition, multiplication, and derivative operator to make $HA$ into a differential ring. In the case where $\mathbb{Q} \subseteq A$, $HA \simeq A[[t]]$, the ring of formal power series over $A$. After describing some important properties of $HA$, we will define the notion of interlacing and show some important properties of interlacing, including a result on the solutions of $n$-th order linear differential equations over $A$.

This talk should be accessible to all graduate students.

Wednesday, 25 March 2015
4:00 pm
Smith Hall 204
Tea and refreshments will be served at 3:45pm.

http://math.newark.rutgers.edu/~xiaowwan/Colloquium/