Algebra
Seminar

Fun with Mac Lane valuations

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Abstract: Mac Lane's technique of "inductive valuations" is over 80 years old, but has only recently been used to attack problems about arithmetic surfaces. We will give an explicit, hands-on introduction to the theory, requiring little background beyond the definition of a non-archimedean valuation. We will then outline how this theory is helpful for resolving "weak wild" quotient singularities of arithmetic surfaces, as well as for proving conductor-discriminant inequalities for higher genus curves. The first project is joint work with Stefan Wewers, and the second is joint work with Padmavathi Srinivasan.

Tuesday, February 12, 2019, 6:00 pm
Mathematics and Science Center: W201

Mathematics
Emory University