Yuichiro Hoshi: **Classical p-adic Teichmuller theory in characteristic three**

A nilpotent admissible indigenous bundle, as well as a nilpotent ordinary indigenous bundle, is a certain projective line bundle equipped with a connection over a hyperbolic curve in positive characteristic and plays a central role in the positive characteristic portion of the classical p-adic Teichmuller theory established by Shinichi Mochizuki. In this talk, I will discuss a characterization, via the Cartier operators, of the supersingular divisor (i.e., the divisor determined by the Hasse invariant) of a nilpotent admissible/ordinary indigenous bundle in characteristic three. I will also explain that this characterization yields respective negative, partial positive answers to two basic questions in p-adic Teichmuller theory. Â