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Wujun Zhang* (wujun@math.rutgers.edu), 110 Frelinghuysen Rd, Piscataway, NJ 08854, and
Ricardo H Nochetto. *Pointwise rate of convergence for the Monge-Ampere equation.*

The Monge-Ampere equation appears in several areas of mathematics and its applications, including differential geometry, calculus of variations, and optimal mass transportation problem.

In the talk, we shall discuss the numerical approximation of the Monge-Ampère equations based on its geometric interpretation and the discrete Alexandroff maximum principle. We show several applications of the Alexandroff maximum principle on the stability estimate of numerical methods and the rate of convergence to the viscosity solution for the Monge-Ampère equations. (Received January 17, 2017)