

THE 3RD SYMPOSIUM ON ANALYSIS AND PDES

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**ON THE OPTIMAL REGULARITY OF SOLUTIONS TO TWO
DIMENSIONAL MONGE-AMPÉRE EQUATION**

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We will discuss the optimal regularity of solutions to degenerate Monge-Ampère equations

$$\det D^2u = f(x, u, \nabla u), \quad \text{on } \Omega \subset R^2$$

in the case where $f \geq 0$ and vanishes at points or interfaces.