

SCMS Seminar

FULLY NONLINEAR GEOMETRIC EQUATIONS ON COMPLEX MANIFOLDS

Speaker: Dr. Wei Sun

Shanghai Center for Mathematical Sciences

Time: 2:00 p.m.-2:30 p.m., Wednesday, July 6, 2016

Venue: Room 2201, East Guanghua Tower (Main), Fudan University

Abstract: Geometric equations play central roles in complex geometry and analysis. Under assumption of cone condition, we derive a priori estimates. As an application, we solve these equations on closed Kaehler manifolds through the continuity method without strong geometric assumptions.

$$b_i = \frac{\sum_{j=1}^{i-1} a_{ij} x_j^{(k)} + \sum_{j=i+1}^n a_{ij} x_j^{(k)}}{\sum_{j=1}^n a_{ij} x_j^{(k)}}$$

$$\Delta y_i = \int_{x_i}^{x_{i+1}} \frac{y' dx}{\sum_{j=1}^n a_{ij} x_j^{(k)}}$$

$$\int_{x_k}^{x_{k+1}} f(x, y) dx = \int_{x_k}^{x_{k+1}} y' dx = y(x)$$

$$\sqrt{(y_n + 0.5\tau k_1)^2 + (t_n + 0.5\tau)^2}$$