

SCMS Seminar



ON SMOOTH INVARIANT FOLIATIONS IN THE STUDY OF DYNAMICAL SYSTEMS

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Lecture

Time: 10:30-11:30 am., Friday, Dec. 1, 2017

Venue: Room 1801, East Main Guanghua Tower, Handan Campus

Abstract: In this talk, we are concerned with invariant foliations near fixed points of diffeomorphisms. We will mainly focus on some interesting cases about smoothness of those foliations, such as their C^r -smoothness without spectral gap conditions and C^1 -smoothness under very weak non-resonant conditions.

$$\Delta y_i = \int_{x_i}^{x_{i+1}} \frac{a_{ij} y_j - (\sum_{j=1}^{i-1} a_{ij} x_j^{(k)} + \sum_{j=i+1}^n a_{ij} x_j^{(k)})}{f(x, y)} dx$$
$$\int_{x_k}^{x_{k+1}} f(x, y) dx = \int_{x_k}^{x_{k+1}} y' dx = y(x)$$
$$-\sqrt{(y_n + 0.5\tau k_1)^2 + (t_n + 0.5\tau)^2}$$

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