

# SCMS Seminar



## ON THE EXISTENCE OF SRB MEASURES FOR A CLASS OF PARTIALLY HYPERBOLIC ATTRACTORS

**Speaker: Yongluo Cao**

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**Time:** 16:00-17:00, Monday, October 15th, 2018

**Venue:** Room 102, Shanghai Center for Mathematical Sciences

### **Abstract:**

In this talk, we consider the existence of SRB measure for partially hyperbolic attractors. If the systems's central direction can be decomposed into one dimension sub-bundles which are dominated splitting, then there exists a SRB measure.

$$b_i = \frac{\sum_{j=1}^{i-1} a_{ij} x_j^{(k)} + \sum_{j=i+1}^n a_{ij} x_j^{(k)}}{k_3 - hf(x_{i-1} + \frac{n}{2}, y_{i-1} + \frac{k_2}{2})}$$

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

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