

**CRUNCH Seminars at Brown, Division of Applied Mathematics**

**Friday – June 14, 2019**

**Paper review 1: Deep Learning for Ocean Remote Sensing: An Application of Convolutional Neural Networks for Super-Resolution on Satellite-Derived SST Data**

Xiang Li

In this paper, the goal of this study is to address the downscaling of ocean remote sensing data (Sea Surface Temperature, SST) using image super-resolution models using SRCNN (Super Resolution CNN). The results point out the relevance of deep learning models specifically trained for ocean remote sensing data and advocate for other applications to the reconstruction of high-resolution sea surface geophysical fields from multi-sensor satellite observations.