

# 中央研究院數學研究所

Institute of Mathematics, Academia Sinica

## Taipei Postdoc Seminar

**Speaker** : Sanghyuck Moon (National Center for Theoretical Sciences)

**Title** : Variational methods for an elliptic equation and system

**Abstract** :

We will see two elliptic problems and construct solutions by variational methods. The first problem is a singularly perturbed Neumann problem with a general nonlinearity term and spike layer solutions for the problem. The second problem is the asymptotic behavior of solutions for coupled Schroedinger equations with mixed interactions. The components of solutions exhibit partial synchronization and segregation when attractive and repulsive couplings are simultaneously large. I will explain the development of results and ideas of variational approach for these problems.

**Time** : 11:00 - 12:30, Wednesday, November 27, 2019

**Venue** : Room 638, Astro-Math. Buidling (NTU Campus)

**Organizer** : Sheng-Fu Chiu (Academia Sinica), Jia-Yuan Dai (National Center for Theoretical Sciences)

**Refreshment** : 10:30

[https://www.math.sinica.edu.tw/www/file\\_upload/conference/2016TPS/index.html](https://www.math.sinica.edu.tw/www/file_upload/conference/2016TPS/index.html)

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