



## SCMS Colloquium

### *Flows Related to Signed Eulerian Graphs*

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**Time: Oct 11th, 10:00 - 11:00**

**Zoom meeting ID: 882 9129 7397**

**Password: 121323**

**Link: <https://us02web.zoom.us/j/88291297397>**

**Venue: Gu Lecture Hall, SCMS**



#### **Abstract:**

For ordinary graphs, Tutte's 5-flow Conjecture states that every bridgeless graph has a nowhere-zero 5-flow. For a signed graph  $G$ , an edge  $e \in E(G)$  is called an  $m$ -bridge of  $G$  if  $e$  is not contained in any circuit of the graphic matroid  $M(G)$ . Bouchet's 6-flow Conjecture states that every  $m$ -bridgeless signed graph has a nowhere-zero 6-flow. In this talk, progress on the above conjectures of Tutte and Bouchet will be discussed, and recent results on flows of signed graphs related to Eulerian graphs will be presented.

#### **About the speaker:**

范更华，福州大学教授、博士生导师，福建福鼎人。国家杰出青年科学基金获得者、享受国务院政府特殊津贴专家。曾任福州大学副校长，中国数学会组合数学与图论专业委员会主任，全国组合数学与图论学会理事长。现任福州大学离散数学及其应用教育部重点实验室主任，中国运筹学会副理事长，《图论杂志》(Journal of Graph Theory) 执行编委。主要从事图论领域中的结构图论、极图理论、带权图、欧拉图、整数流理论、子图覆盖等方向的基础理论研究。致力于图论在大规模集成电路设计中的应用。由个人独立完成的科研成果“哈密顿圈及圈覆盖理论”获 2005 年度国家自然科学奖二等奖（2005 年一等奖空缺）。

