## 东南大学数学学院邀请专家申请表

| 报告人   | 朱绪鼎  | 单位 | 浙江师范大学                     |
|-------|--|----|----------------------------|
| 报告题目  | The strong fractional choice number of graphs  |    |                            |
| 报告时间  | 2020/12/19<br>14:00-15:00  | 地点 | 线上报告: 腾讯会议 ID: 700 950 453 |
| 邀请人   | 林文松  |    |                            |
| 报告人摘要 | 简介<br>朱绪鼎,教授,国家高端专家,浙江师范大学特聘教授,浙江师范大学离<br>散数学研究中心主任,第三批国家"千人计划"入选者。1991年获加拿大<br>卡尔加里大学数学博士,曾担任台湾中山大学西湾讲座教授。研究专长是<br>图论、演算法和组合优化。在图的染色理论、结构分析、演算法等领域做<br>出了杰出的贡献,取得一系列重大研究成果。在国际 SCI 期刊发表论文 200<br>余篇。依 MathSciNet 统计,所发表论文被引用 1900 余次。H-index 为 22。<br>现任《Electronic J. Combinatorics》,《J. Graph Theory》,《European<br>J. Combin.》,《Discrete. Mathematics》,《Contrib. Discrete Math.》,<br>《Discuss. Math. Graph Theory Graph Theory》,《Bulletin of Academia<br>Sinica》,《Taiwanese Journal of Mathematics》等国际学术期刊编委。<br>2014年获得中国侨联第五届《中国侨界贡献奖》。   |    |                            |
| 报告简介  | An $a$ -list assignment of a graph $G$ is a mapping $L$ which assigns to each vertex $v$ of $G$ a set $L(v)$ of $a$ colours. A $b$ -fold colouring of $G$ is a mapping $\phi$ which assigns to each vertex $v$ of $G$ a set $\phi(v)$ of $b$ colours such that for every edge $uv$ , $\phi(u) \cap \phi(v) = \emptyset$ . An $(L,b)$ -colouring of $G$ is a $b$ -fold colouring $\phi$ of $G$ such that $\phi(v) \subseteq L(v)$ for each vertex $v$ . We say $G$ is $(a,b)$ -choosable if for any $a$ -list assignment $L$ of $G$ , there is an $(L,b)$ -colouring of $G$ . A graph $G$ is strongly fractional $r$ -choosable if $G$ is $(a,b)$ -choosable for all positive integers $a,b$ for which $a/b \ge r$ . The strong fractional choice number of $G$ is $ch_f^s(G) = \inf\{r : G \text{ is strongly fractional } r\text{-choosable.}\}.$ We would like to use the strong fractional choice number is as a refinement of the choice number. However, it remains unknown if $ch_f^s(G) \le ch(G)$ for every graph $G$ . In this talk, I will survey results concerning this parameter and some open questions. The talk contains joint work with Yiting Jiang, Rongxing Xu, Xuer Li. |    |                            |