

数学与系统科学研究院

计算数学所学术报告

报告人: **Dr. Jameson Cahill**

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报告题目:

**Geometry of unit norm tight frames**

邀请人: 许志强 研究员

报告时间: **2014 年 6 月 20 日 (周五)**

**上午 9:30-10:30**

报告地点: 科技综合楼三层 **301**

计算数学所小报告厅

## **Abstract:**

**In this talk, we settle a long-standing problem on the connectivity of spaces of finite unit norm tight frames (FUNTFs), essentially affirming a conjecture first appearing in Dykema and Strawn (2003). Our central technique involves continuous liftings of paths from the polytope of eigensteps (see Cahill et al. (2012)) to spaces of FUNTFs. After demonstrating this connectivity result, we refine our analysis to show that the set of nonsingular points on these spaces is also connected, and we use this result to show that spaces of FUNTFs are irreducible in the algebro-geometric sense, and that generic FUNTFs are full spark.**

**欢迎大家参加!**