



Der Wissenschaftsfonds.



JOHANNES KEPLER
UNIVERSITÄT LINZ



JOHANN · RADON · INSTITUTE
FOR COMPUTATIONAL AND APPLIED MATHEMATICS

Einladung

zum Vortrag im Rahmen des **SFB Colloquiums** (Standort Linz) bzw. des Group Seminars (RICAM), mit dem Titel

Uniform distribution problems on the sphere

VORTRAGENDER: **Dmitriy Bilyk**, University of Minnesota

DATUM: Mittwoch, 21. Juni 2017

ZEIT: 11:00 Uhr

ORT: Science Park 2, SP2 416-2, RICAM

Abstract: We shall discuss some new results and connections between different concepts of uniform distribution of points on the sphere, such as discrepancy, energy minimization, cubature formulas and designs, uniform tessellations, almost isometric embeddings etc. A central role will be devoted to numerous recent versions, extensions, and generalizations of the so-called Stolarsky invariance principle – an identity, which connects optimal discrepancy and energy minimizing points on the sphere. We shall also provide applications of this principle to discrepancy estimates, energy optimization, and various problems of discrete geometry.

Parts of this work have been done jointly with M. Lacey, R. Matzke, and F. Dai

Das **SFB Colloquium** wird vom **FWF Special Research Program (SFB) Quasi-Monte Carlo Methods: Theory and Application** unterstützt