College of Arts and Sciences **Interdisciplinary Mathematics Institute** University of South Carolina, Columbia, SC, USA

NSF-CBMS Conference on **Additive Combinatorics** from a Geometric Viewpoint

May 21-25, 2018

APPLICATION DEADLINE:

January 31, 2018

APPLY ONLINE AT:

http://mathprograms.org/db/programs/622

dditive combinatorics is a very active area of mathematics. It is the crossing point of number theory, harmonic analysis, ergodic theory, and combinatorics. Through a series of 10 principal lectures, Dr. József Solymosi (University of British Columbia) will provide an elementary introduction to additive combinatorics using discrete geometry, algebra, extremal combinatorics, and a bit of algebraic geometry. He will also show how to apply these techniques in order to attack Erdős type problems in discrete geometry.

The principal lectures will be complemented by 4 one-hour lectures by Gyula Károlyi, Giorgis Petridis, Orit Raz, and Joshua Zahl.

Problems to be solved will be distributed and discussed. Open problem sessions will provide opportunity for collaboration among the participants.



Principal Speaker: József Solymosi

University of British Columbia, Vancouver



Gyula Károlyi Rényi Institute, Budapest, Hungary

Giorgis Petridis University of Georgia, Athens, GA



Orit Raz University of British Columbia, Vancouver



Joshua Zahl University of British Columbia, Vancouver

This program is designed for graduate students and early-career researchers working on related topics, and to help those who intend to enter the field.

Limited financial support for accepted participants is available. For more information, please visit the **conference website** at:

http://imi.cas.sc.edu/events/nsf-cbms/

Organizers: László Székely (Chair), Éva Czabarka and Frank Thorne University of South Carolina, Department of Mathematics

The Conference on Additive Combinatorics from a Geometric Viewpoint is made possible by a generous grant from the National Science Foundation. Additional support is provided by the Interdisciplinary Mathematics Institute, USC.



UNIVERSITY OF SOUTH CAROLINA College of Arts and Sciences