

## INTUITIVE GEOMETRY WORKSHOP AND INTUITIVE GEOMETRY DAY IN CALGARY (AUGUST 31, 2007–SEPTEMBER 3, 2007)

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### 1. Summary

The Intuitive Geometry Workshop was held at the Banff International Research Station in Banff, Canada from August 31 to September 2, 2007. This two-day workshop was organized to provide a much desired opportunity to share research findings in the interconnected fields that are represented in Intuitive Geometry. The term *Intuitive Geometry* was coined by László Fejes Tóth to denote those geometric disciplines in which the unifying theme is that their problems themselves can be explained fairly easily, even to an advanced high school student, however, the solutions of these problems require difficult and very deep methods of modern mathematics. This Workshop is also part of a series of Intuitive Geometry conferences the first of which was organized in 1975 in Tihany, Hungary, and the last one was in 2000 in Balatonföldvár, Hungary. This workshop was the sixth such meeting.

The Intuitive Geometry Workshop was immediately followed by the Intuitive Geometry Day in Calgary held at the Department of Mathematics and Statistics of the University of Calgary on September 3, 2007. The Intuitive Geometry Day was a direct continuation of the Intuitive Geometry BIRS workshop. Its main purpose was to provide an extension to the BIRS event and thus make attendance of the workshop more desirable to colleagues from overseas. In this regard, the event was a great success, out of the 30 participants 11 were from outside North America. The 30

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participants of the meetings gave 24 high quality research talks on their recent results of which 16 were 30-minute and 8 were 20-minute presentations. The subjects of talks covered the broad areas of general convexity, iterative geometric processes, the theory of packing and covering both in Euclidean and hyperbolic spaces, polytopal approximation of convex bodies, Minkowski geometry, combinatorial geometry, the theory of geometric transversals, extremal problems for convex sets, and abstract and convex polytopes.

The two workshops were resounding successes, they brought together researchers from many different fields of Geometry, and among them, 3 advanced graduate students and several postdoctoral fellows. New collaboration among participants is already noticeable, especially among the graduate students and postdocs. In summary, the future directions for research in Intuitive Geometry are plentiful and the area is very much alive being a central part of modern geometric research.

Some results presented at the Workshop and the Intuitive Geometry Day in Calgary are published in this special issue of *Periodica Mathematica Hungarica*.

The Intuitive Geometry Day in Calgary was generously supported by the Pacific Institute for the Mathematical Sciences, the Faculty of Science, and the Department of Mathematics and Statistics of the University of Calgary.

## 2. List of Participants

<b>Name</b>	<b>Affiliation</b>
Ambrus, Gergely	University of Szeged, Hungary and University College London, U.K.
Bárány, Imre	Alfréd Rényi Institute of Mathematics, Hungary and University College London, U.K.
Bezdek, András	Auburn University, U.S.A. and Alfréd Rényi Institute of Mathematics, Hungary
Bezdek, Károly	University of Calgary, Canada
Bisztriczky, Ted	University of Calgary, Canada
Böröczky, Károly	Eötvös Loránd University, Hungary
Bracho, Javier	Universidad Nacional Autónoma de México, Mexico
Fejes Tóth, Gábor	Alfréd Rényi Institute of Mathematics, Hungary
Fisher, J. Chris	University of Regina, Canada
Fodor, Ferenc	University of Szeged, Hungary and University of Calgary, Canada
Guy, Richard K.	University of Calgary, Canada
Heppes, Aladár	Alfréd Rényi Institute of Mathematics, Hungary
Holmsen, Andreas	University of Bergen, Norway
Hubard, Alfredo	New York University, U.S.A.
Ismailescu, Dan	Hofstra University, U.S.A.