Deutsche Forschungsgemeinschaft

**German Research Foundation** 

## **Leibniz Lecture**



Günter M. Ziegler

Gottfried Wilhelm Leibniz Prize 2001 Communicator Award 2008

Prof. Günter M. Ziegler

Professor of Mathematics at Freie Universität Berlin Head of the "Discrete Geometry" group



## Sugar cubes, soap bubbles, a revolution and a star: Some stellar images between Mathematics and Physics

## 27 March 2014, 6.00 pm

St. Petersburg Department of the V.A.Steklov Institute of Mathematics of the Russian Academy of Sciences Marble Hall, 27, Fontanka, 191023 Saint Petersburg

In cooperation with Freie Universität Berlin

Günter M. Ziegler was born in München, Germany, in 1963. He got a Ph.D. at M.I.T. with Anders Björner in 1987. In 1995 he became a Professor of Mathematics at TU Berlin. In 2006 he became the founding chair of Berlin Mathematical School, where he remains active as a co-chair. He has been a member of the DFG Research Center MATHEON - Mathematics for Key Technologies - since its start in 2002. In 2011 he joined Freie Universität Berlin as a MATHEON Professor.

His interests connect discrete and computational geometry (especially polytopes), algebraic and topological methods in combinatorics, discrete mathematics and the theory of linear and integer programming. He is the author of Lectures on Polytopes (Springer 1995), of Proofs from THE BOOK (with Martin Aigner, Springer 1998), which has by now been published in 14 languages, and of "Darf ich Zahlen? Geschichten aus der Mathematik" (English translation: "Do I count? Stories from Mathematics", CRC 2013). His latest book is "Mathematik - Das ist doch keine Kunst!" (Knaus-Verlag, München 2013).

His honors include a Leibniz Prize (2001) of the German Research Foundation (DFG), the Chauvenet Prize (2004) of the Mathematical Association of America, and the 2008 Communicator Award of DFG and Stifterverband. He is a member of the executive board of the Berlin-Brandenburg Academy of Sciences, a member of the German National Academy of Sciences Leopoldina, a member of the National Academy of Science and Engineering (*acatech*) and a Fellow of the American Mathematical Society. From 2006 to 2008 he was the President of the German Mathematical Society (DMV). He initiated and co-organized the German National Science Year "Jahr der Mathematik 2008" and now directs the DMV Mathematics Media Office and the DMV Network Office Schools-Universities.

German Research Foundation

The **Gottfried Wilhelm Leibniz Prize** is the highest honor awarded in German research. Established in 1985, the prize provides an unparalleled degree of freedom to outstanding scientists and academics in which to pursue their research interests. Up to ten prizes are awarded annually with a maximum of €2.5 million per award. Prize recipients are awarded the prize solely on the basis of the scientific quality of their work. The Leibniz Prize honors the well-known scientist and humanist Gottfried Wilhelm Leibniz (1646-1716), who was a leading figure in the fields of philosophy, mathematics, physics and theology.

The **Communicator Award** is a personal award worth 50.000 Euro meant for scientists who have been exceptionally successful in communicating their research to the public. The jury consists of science journalists, communications and PR professionals and is chaired by one of DFG's vice presidents. Günter M. Ziegler won this award in 2008.

The **German Research Foundation (DFG)** is the central, self-governing organization funding science and basic research in Germany. Serving all branches of science and the humanities, its members comprise German research universities, non-university research institutions, scientific associations and the Academies of Science and the Humanities.

The chief task of DFG is to fund the best research projects by scientists and academics at universities and research institutions, which are selected on the basis of a multi-layered peer review process. DFG is a cornerstone of Germany's strength as a research nation and it plays a key role in structuring the European research area.

Among its objectives, DFG also places special emphasis on young scientists and academics and has special programs for every stage of their qualifications with early research independence. It also promotes gender equality and has a broad representation of the scientific disciplines within the self-government of DFG, which ensures the diversity and originality required for outstanding research. DFG also advises governments and parliaments on scientific questions such as stem cell or animal research. It also fosters the relationship between scientists in Germany and abroad.

The DFG organizes Leibniz Lectures in different regions across the world in order to promote German science, especially at locations where it has its own foreign representations like the **DFG Office Russia/CIS**. These six countries are: Brazil, Russia, India, China, Japan and the USA. Germany's scientific relations with Russia are part of a lively, centuries-old tradition. Russia is particularly significant for the German scientific system and is a priority country in the DFG's international funding programmes. The DFG has maintained an intensive scientific dialogue with Russia for decades and, since 2003, has supported the development of bilateral cooperation through its own representative office in Moscow. As well as being the DFG's Russian headquarters, this liaison office functions as a local point of contact, providing advice and mentoring in cooperation programmes.