Abel Prize 2009

Said about Mikhail Leonidovich Gromov



Mikhael Leonidovich Gromov was born on December 23, 1943, in Boksitogorsk, USSR, and has been a French citizen since 1992. He studied at the University of Leningrad, where he received his doctorate in 1969. In 1974 he left the USSR and became a professor at the State University of New York at Stony Brook. In 1981 he moved to the Université de Paris and the following year assumed his present position as a permanent professor at the Institut des Hautes Études Scientifiques in Bures-sur-Yvette, France. Maikhail Gromov has been awarded numerous important prizes for his mathematical work. It is said about Mikhail Gromov and his contributions to mathematical science (including a statement of Gromov himself):

Marcel Berger said: *The works of Mikhail Gromov should be read until the pages fall of.*

Dennis Sullivan about Mikhail Gromov: It is incredible what Mikhail Gromov can do, just with the triangle inequality.

Citation of the *Nemmers Prize in Mathematics: Mikhail Gromov's work has been revolutionary in a number of basic areas of modern geometry.*

Citation of the *Balzan prize for Mathematics:* The prize is awarded to Mikhail Gromov for his numerous, most original and profound contributions to Geometry in its various forms, and for the way in which he has applied them to many other domains of Mathematics and of Theoretical Physics.

Citation of the Leroy P. Steele Prize for Seminal Contribution to Research: Mikhail Gromovs paper, Pseudo-holomorphic curves in symplectic manifolds from 1985, revolutionized the subject of symplectic geometry and topology and is central to much current research activity, including quantum cohomology and mirror symmetry.

Citation of the *Kyoto Prize in Mathematical Sciences: While mathematicians before him* studied individual properties of space, Prof. Gromov proposed the innovative idea of considering the distance between spaces -- which he identified as "like" (close) or "unlike" (far) -- to create a deeper understanding by allowing spaces to be compared. Based on this idea, he has solved a great number of problems, particularly those concerning the relationships between the global structure of a space and its curvature, and the degree to which an object is bent locally.



Mikhail Gromov to *Marcel Berger:* The readers of my papers look only at corollaries, sometimes also at the technical tools of the proofs, but almost always never study them deeply enough in order to understand the underlying thought.