

## JEAN-CHRISTOPHE YOCCOZ

Jean-Christophe Yoccoz died on September<sup>3rd</sup>, 2016. With the passing away of Jean-Christophe Yoccoz, the Collège de France has lost one of its most brilliant members, a truly dazzling mathematician, who quickly emerged as the world leader in the theory of dynamical systems initiated in the late 19<sup>th</sup> century by Henri Poincaré. The theory deals with the long-term qualitative behavior of dynamical systems. It involves, for instance, understanding whether the solar system is stable. Can a planet suddenly be ejected from the system? Two types of radically different behaviors come into play. Either the movement can exhibit stable and "predictable" features or else it can exhibit chaotic features. The work carried out by Prof. Yoccoz provided greater insight into the boundary between these two behaviors.

As a former student of the École Normale Supérieure where he ranked first for the admissions exam in 1975, at the age of 18, and gold medal winner at the International Mathematical Olympiad in 1974, Jean-Christophe Yoccoz completed his thesis under Michael Herman in 1985 and was awarded the Fields Medal in 1994. In the same year, he became a member of the French Academy of Sciences and the Academy of Sciences in Brazil. In 1996, he took up the position of professor at the Collège de France for the Chair in Differential Equations And Dynamical Systems.

He obtained a number of decisive results for the most challenging problems related to dynamical systems, and his demonstrations combined extraordinary analytical prowess, superb geometric vision and utter mastery of the combinatorics illustrated by what is now referred to as "Yoccoz puzzles".

Jean-Christophe Yoccoz was a fun-loving man, with an unhesitating laugh even at the worst stages of his illness. He was discrete but warm-hearted and always available to help others. He knew how to stand firm on his stances while always remaining kind, good-humored and uncomplicated. He will be greatly missed.

*Alain Connes, Etienne Ghys, Pierre-Louis Lions*