

Dr. Camillo De Lellis School of Mathematics University of Zuerich USA

Camillo De Lellis (born June 11, 1976) is an Italian mathematician who is active in the fields of calculus of variations, hyperbolic systems of conservation laws, geometric measure theory and fluid dynamics. He graduated in Scuola Normale Superiore in 2002 and has been professor in the University of Zuerich. He is currently a permanent faculty member in the School of Mathematics at the Institute for Advanced Study.

De Lellis has given a number of contributions in different fields related to partial differential equations. In geometric measure theory he has been interested in the study of regularity and singularities of minimising sufaces, pursuing a program (joint with Emanuele Spadaro) aimed at disclosing new aspects of the theory started by Almgren in his "Big regularity paper".

De Lellis has also worked on various topics in the theory of hyperbolic systems of conservation laws, transport equations and incompressible fluid dynamics. In particular, together with László Székelyhidi Jr., he has used techniques from differential geometry and differential inclusions to analyse non-uniqueness issues for weak solutions to the Euler equation. These techniques have eventually lead Isett to the solution of the Onsager conjecture and Buckmaster and Vicol to their proof of nonuniqueness for weak solution of the 3d Navier-Stokes equations.