



SCUOLA
NORMALE
SUPERIORE

SEMINARIO DI MATEMATICA

Giovedì 23 febbraio 2012

Ore 16.00

Scuola Normale Superiore

Pisa

Sala Conferenze Collegio Puteano

Henk Bruin

University of Surrey

Terrà un seminario dal titolo:

“Hausdorff dimension of biaccessible angles of quadratic Julia sets and of the Mandelbrot set”

Abstract:

For "most" parameters c on the boundary of the Mandelbrot set, the Julia set J_c of the corresponding quadratic polynomial $z \mapsto z^2 + c$ is a dendrite, that is, a one-dimensional, compact, connected, locally connected set without loops. A point z on this dendrite is biaccessible if the external ray of at least two different angles land on z . By extension, we call an angle biaccessible if its ray lands together with the ray of another angle. In this joint work with Dierk Schleicher (Jacobs University Bremen), I want to present combinatorial methods to detect biaccessible angles, giving tools to estimate their Hausdorff dimension. Due to the local similarity between the Julia set J_c and the Mandelbrot set near c , such methods can also be applied to the biaccessible angles in parameter space.

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze