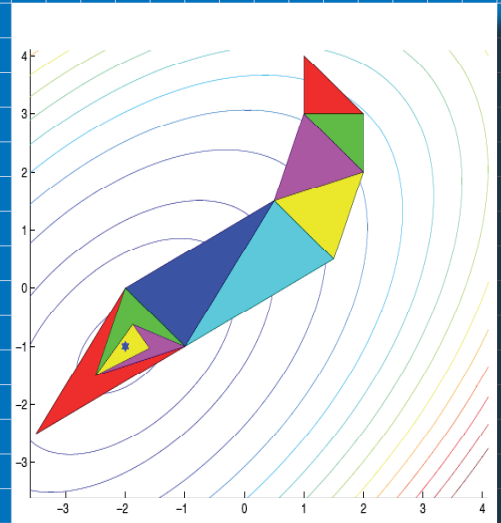**Berlin Mathematical School**

BMS Kovalevskaya Colloquium

Friday, 19 June 2009, 2:30 pm

Tea before the lecture starts at 2 pm

BMS Loft, Urania
An der Urania 17, 10787 Berlin

Margaret H. Wright (Courant Institute of Mathematical Sciences):

"Non-derivative optimization: Mathematics, engineering, or heuristics?"

Non-derivative methods of optimization have been widely used with notable success in science and engineering for at least 50 years. Although their mathematical foundations were mostly lacking until the late 1980s, research on the theoretical and computational properties of old and new non-derivative techniques has flourished since then, and continues to grow. A notable feature of this research field is lively disagreement about which methods are 'most effective', in part because several mathematical questions are unresolved (and perhaps unresolvable).

Margaret H. Wright will briefly survey the current state of the art, with special emphasis on the interesting mathematical issues and their relationship with the performance observed in practice.

Jürg Kramer, Humboldt-Universität zu Berlin
Christof Schütte, Freie Universität Berlin
Günter M. Ziegler, Technische Universität Berlin
http://www.math-berlin.de