Today, subdivision algorithms are a key technology in Computer Graphics, and extensively used for instance in the production of computer-animated feature films. Certainly, their tremendous success was hardly conceivable when, about 70 years ago, pure mathematician Georges de Rham pioneered this field by analyzing traditional craftsmen technology for producing hammer shafts.

In this talk, Ulrich Reif will outline the story of subdivision algorithms and explain how it was - and still is - driven by the interplay of ever increasing designers’ demands and the development of a fascinating mathematical theory.

Ulrich Reif is a Professor at the Department of Mathematics at Darmstadt University of Technology since 2000. He studied mathematics and electrical engineering at Stuttgart University. His fields of interest include Geometric Modeling, Subdivision algorithms, and spline approximation.