



LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

ARNOLD SOMMERFELD
CENTER FOR THEORETICAL PHYSICS



Arnold Sommerfeld Lecture Series

Professor Boris Shraiman
KITP, Santa Barbara, USA

Colloquium at Gene Center Munich:

Mechanics and Growth Control in Animal Development

Precise control of cell proliferation and tissue growth is important for normal development, while dis-regulation of cell proliferation causes disease. Traditionally the study of growth control has been focused entirely on the bio-chemical "signals", such as secreted growth factors. More recently, it has been realized that physical interactions between cells in tissues may also be playing an important role. This talk will review the general idea of "mechanical feedback" as a regulator of growth, discussing some of the evidence based on the study of *Drosophila* wing development and on the study of so called "contact inhibition" in cultured epithelial cells and presenting the current understanding of the molecular mechanism that links mechanical stress and growth control.

**Monday, October 12, 2015, 17:00 h, Room A 0.75, Feodor-Lynen-Str. 25,
Gene Center Munich**