

# Max-Planck-Institut für Dynamik und Selbstorganisation

Max Planck Institute for Dynamics and Self-Organization



MAX-PLANCK-GESellschaft

The Max Planck Institute for Dynamics and Self-Organization at Göttingen, Germany, is an international research institute. It performs both experimental and theoretical fundamental scientific research and currently employs about 250 people.

For the independent research group of Dr. Karen Alim we seek to fill

## Postdoctoral positions (m/f) in Biological Physics.

We are looking for excellent, highly motivated early-career researchers to join our research team.

The research of the independent Max Planck research group combines experimental and theoretical methods to investigate how an organism grows to form a desired structure and pattern. Understanding the morphogenesis of an organism, the collective self-organization of cells that gives rise to a functional structure is at the heart of decoding life. We aim to identify the rules of development by studying the physical principles underlying the formation and adaptation of biological organisms. Currently we investigate the mechanics of plant growth and the fluid dynamics enabling the slime mold *Physarum polycephalum* to adapt its network-like body to its environment. Our approach is primarily theoretical and closely interacting with experiments. On the theoretical side, we use analytical and numerical methods from mechanics, fluid dynamics, statistical physics and non-linear dynamics. On the experimental side, we have our own laboratory where we investigate the adaptation dynamics of *Physarum polycephalum* and enjoy collaborations around the world.

The Max Planck Institute for Dynamics and Self-Organization is a highly international, interdisciplinary and collaborative environment offering an exceptional research setting.

The Postdoctoral position is limited to two years with the possibility of extension. Earliest starting date is **October 15, 2016**. Salary is in accordance with the German state public service salary scale (E13 TVöD-Bund) and the accordant social benefits.

The Postdoctoral candidate should hold a PhD degree in biology, experimental physics, theoretical physics, applied mathematics, or in a related field. The ideal experimental candidate should have experience with biological systems and quantitative data analysis. The ideal theoretical candidate should have experience in statistical/soft matter physics and programming. Fluency in English is a requirement.

The Max-Planck society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals. The Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.

To apply, please send your CV, publication list, a statement of interests and at least two letters of reference. Your statement of interests should briefly describe your past and current research interests and why you are interested in joining our group. For full consideration please send your application material in a single pdf file, quoting reference no. **07/2016**, until **September 30, 2016** by email to karen.alim@ds.mpg.de.

### MPI for Dynamics and Self-Organization

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