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| Department: | PULS Group, Institute for Theoretical Physics |
| Job site: | FAU Erlangen |
| Description of the position: | **PhD Position: Modeling the 3D shaping of epithelial tissue: The effect of the mechanical microenvironment** |
| Job description: | **Our profile**  The PULS Group (Physics Underlying Life Science) led by Prof. Ana-Sunčana Smith offers a PhD position on topics associated with multiscale modelling of tissues. It is located in the Interdisciplinary Centre for Nanostructured Films at the University of Erlangen Nürnberg. The group is renowned for its contributions to the field of theoretical biophysics and is offering a highly interdisciplinary and international working environment, besides access to outstanding facilities. The candidates will be trained in advanced analytic and computational tools of statistical physics, which may involve high-performance multiscale simulations and AI approaches, applied to modeling growth, structuring and maintenance of epithelium.  We will offer you the possibility to perform research within an international and interdisciplinary team in a highly innovative and active research area comprising mechanics, material sciences, mathematics, chemistry, and physics. The selected candidate will follow the structured doctoral program of MEET3, where she/he will receive comprehensive soft skill training.  **Your tasks**   * Develop simulations and analytical tools for modeling different aspects of tissue growth and maintenance * Participate in data analysis and contribute to the interpretation of experimental data, acquired in the consortium * Contribute to the daily life of the group * Follow the MEET training |
| Requirements: | **Your profile**   * you are an excellent student holding or are about to obtain a M.Sc. degree with a background in computational/ theoretical physics or mathematics, with reasonable programming skills * you can demonstrate interest in biophysics * you are proficient in the English language; knowledge of the German language is welcome but not compulsory * - you have strong interpersonal skills and can work in a team |
| Pay category: | TVöD Bund 13 |
| Hiring date: | July 01, 2022 |
| Duration of employment: | 3 years |
| Contact/Send application to: | Prof. Dr. rer. nat. Ana-Suncana Smith  Email: [smith@physik.fau.de](file:///\\fs-moca01\user\abreitscheidel\1-MOCA\6%20-%20ME3T\Stellenausschreibung\2022\smith@physik.fau.de), phone: +49 9131 85-70565  <http://puls.physik.fau.de/> |
| Equal career prospects for women and men. | |
| Severely disabled applicants with equal qualification will be given preferential consideration. | |
| **Application deadline: March 31, 2022** | |