Open Positions

The Chair of Algebraic and Logical Foundations of Computer Science offers positions as research associate, PhD student, or Postdoc in the cluster of excellence CeTI (https://ceti.one) and the collaborative research center 248 (see https://perspicuous-computing.science)

TVL-E13 full-time research contract of 3½ years (with a possibility of extension)

Field of research
Within CeTI, formal methods will support research on tactile internet applications with human-in-the-loop. Here, we focus on novel learning concepts in human-computer interaction. The CRC 248 investigates perspicuity in the life cycle of cyber-physical systems by providing understandability at design-time, plausibility at run-time, and justifiability at inspection-time. Topics in our projects within CeTI and the CRC 248 mainly rely on stochastic operational models and their analysis, using techniques from Bayesian reasoning and probabilistic abduction, mathematical explanations about cause-effect relations, causality-based verification, certification of stochastic dynamical and hybrid systems, compositional reasoning with operational and declarative component summaries, and inference over neuroscientific models.

Requirements
We are looking for candidates with a very good to excellent university degree or doctorate in mathematics, computer science, or related fields with knowledge in stochastic models and their analysis. Active collaboration with mathematicians, neuro- and computer scientists in interdisciplinary research projects is expected.

Further Information
For more information see the web pages of CeTI (https://ceti.one) and CRC 248 (https://perspicuous-computing.science)

Do not hesitate to ask questions via email secretary_alg@mailbox.tu-dresden.de

Prof. Dr. Christel Baier
Lehrstuhl für algebraische und logische Grundlagen der Informatik