Der Fachbereich Informatik der Johannes Kepler Universität Linz\(^1\) lädt in Zusammenarbeit mit der Österreichischen Gesellschaft für Informatik (ÖGI) zu folgendem Vortrag ein:

**Topic:** Logic synthesis on memristor crossbar

**Presenter:** Prof. Indranil Sen Gupta, Indian Institute of Technology Kharagpur

**Datum:** Tuesday, September 26\(^{th}\) 2017, 10:00

**Location:** JKU, Science Park 2, room S2 054

**Abstract:** Research in the area of memristors and their applications have picked up in recent years, with the emergence of interesting application areas like non-volatile resistive memory design, neuromorphic computing, in-memory computing, etc. This talk will largely focus on the use of memristive systems in logic design. In particular, the memristor crossbar architecture will be considered as the target platform for logic implementation. Some of the logic design approaches, as well as some of the challenges in implementing them on the crossbar shall be discussed.

**Short Bio:** Indranil Sengupta obtained his B.Tech., M.Tech. and PhD degrees in Computer Science and Engineering from the University of Calcutta in the years 1983, 1985 and 1990 respectively. He joined Indian Institute of Technology Kharagpur, as a faculty member in 1988, in the Department of Computer Science and Engineering, where he is presently a Full Professor. He had been the former Heads of the Department of Computer Science and Engineering, and School of Information Technology. He has over 29 years of teaching and research experience, guided 20 PhD students and published over 180 papers in peer reviewed journals and conferences. He has served as the Program Chair / General Chair in several International Conferences in the areas of VLSI design, reversible computing, and information security. His research interests include VLSI design and test, reversible and quantum computing, and network security. He is a Senior Member of the IEEE.

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