



## Mathematics and CS Seminar

# Scalable systems for continuous processing of data streams

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While the early wave of big data technologies focused largely on accommodating the scale and complexity of available information, emerging data-driven applications additionally require low-latency and continuously updated results. Stream processing renounces the traditional view of static data inputs and instead advocates for long-running analysis of possibly unbounded event streams. In this talk, I discuss fundamental research challenges in building next-generation streaming systems capable of automatic re-configuration without downtime. I will share recent work on an automatic scaling controller which makes fast and accurate scaling decisions via lightweight runtime instrumentation and a comprehensive dataflow performance model. I will conclude with open problems and future directions in automatic, long-running operation of streaming computations and large-scale continuous data analytics in general.

**Thursday, February 28, 2019 09:00am - 10:00am**

Mondi Seminar Room 2, Central Building



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

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