Random Algorithms

Organizer(s):
Petra Berenbrink (Simon Fraser University)

Description:

Randomness has been accepted in computer science as a useful resource for developing efficient protocols and algorithms. The study of randomized algorithms is firmly established within the community. This workshop will present a collection of techniques, ideas, and problem areas that demonstrate and motivate the usefulness of randomization in algorithms research.

Titles and Speakers:

- *The Price of Privacy and the Limits of LP Decoding*
  <u>Kunal Talwar</u> (Microsoft Research), Cynthia Dwork (Microsoft Research), and Frank McSherry (Microsoft Research).

- *Balanced Allocations: The Weighted Case*
  <u>Udi Wieder</u> (Microsoft Research), and Kunal Talwar (Microsoft Research).

- *A Sublinear-Time Approximation Scheme for Bin Packing*
  <u>Tugkan Batu</u> (London School of Economics), Petra Berenbrink (Simon Fraser University), Christian Sohler (University of Paderborn).

- *Finding Frequent Patterns in a String in Sublinear Time*
  Petra Berenbrink (SFU), <u>Funda Ergun</u> (SFU), and Tom Friedetzky (University of Durham).

- *Distributed Selfish Load Balancing*
  <u>Russell Martin</u>, Leslie Ann Goldberg, Paul Goldberg (University of Liverpool), Tom Friedetzky (University of Durham), Petra Berenbrink (SFU), and Zengjian Hu (SFU).