Planning Dagstuhl Seminar.

## Monday April 27

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09:00: Welcome by the organisers

09:15: Tutorial on Probabilistic Programming

Languages

Angelika Kimmig

10:45: Coffee break

11:15: Domain-specific Probabilistic Programming

Languages

Vikash Mansinghka

TBA

Michael Carbin

12:15: Lunch

14:00: Tutorial on Probabilistic Programming in

Machine Learning

Frank Wood and David Tolpin

15:30: Coffee break

16:00: Schema-based Probabilistic Programming

Andy Gordon

Design and Implementation of Figaro

Avi Pfeffer

17:00: Short (10 minute talks) and open problems

18:00: Dinner

## Tuesday April 28

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09:00: Quantitative Information Flow

Geoffrey Smith

09:30: Tutorial on Probabilistic Programs in Security

Piotr Mardziel

10:45: Coffee break

11:15: Equivalences for Probabilistic Programming

Languages

Ugo Dal Lago

Rational Protection Against Timing Attacks

Boris Köpf

12:15: Lunch

14:00: Dual Abstractions of Hidden Markov Models

Tahiry Rabehaja

Security and Privacy

Catuscia Palamidessi

TBA

Gilles Barthe

15:30: Coffee break

16:00: Dyna

Jason Eisner

17:00: Short (5-10 minute talks) and open problems:

Marco Gaboardi

Catuscia Palamidessi

Geoffrey Smith

18:00: Dinner

Wednesday April 29

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09:00: Tutorial on Probabilistic Programming in

Machine Learning

Frank Wood

10:30: Coffee break

11:00: On Hardness of Almost-Sure Termination

Benjamin Kaminski

Termination of Probabilistic Programs

Luis Ferrer Fioriti

12:15: Picture in front of the Dagstuhl chapel

12:20: Lunch

13:45: Computability of Conditioning

Cameron Freer

Conditioning in Probabilistic Programs

Friedrich Gretz

Conditioning by Lazy Partial Evaluation

Chung-chieh Shan

Domain-specific Probabilistic Programming

Languages

Vikash Mansinghka

15:45: Coffee break

16:15: Three tokens suffice

Joel Ouaknine

Polynomial Quantitative Loop Invariants by Lagrange Interpolation

Lijun Zhang

17:15: Short (5-10 minute talks) and open problems
Andreas Stuhlmüller
Johannes Hölzl
Stefan Kiefer
Benjamin Kaminski

18:00: Dinner

Thursday April 30

09:00 Probabilistic Programs in Quantum Computing
Mingsheng Ying
Topological Quantum Computing
Alessandra di Pierro
NetKAT
Alexandra Silva

10:45: Coffee break

11:15: Types and Modules for Probabilistic Models Norman Ramsey

Wolfe: Declarative Machine Learning using Functional

Probabilistic Programming Sameer Singh

12:15: Lunch (End of the workshop).