

**Professor Miriam Cohen**

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**פרופ' מרים כהן**

ראש המרכז ללימודים מתקדמים במתמטיקה  
המחלקה למתמטיקה  
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**The Department of Mathematics and the Center of Advanced Studies in Mathematics  
announce a special meeting to mark the award of  
the Gauchman excellence scholarship and the Noriko Sakurai fellowship for the year 2019  
Tuesday, May 21 at 12:30 at the Deichmann building for Mathematics (58), Seminar room -101**

**Program:**

**12:30-14:00 Lunch**

**14:00 Opening remarks:**

***Prof. Miriam Cohen,***

Director of the Center of Advanced Studies in Mathematics

***Prof. Daniel Sternheimer,***

Rikkyo (Japan) and Bourgogne (France) Universities

***Ms. Julia Gauchman, on behalf of Gauchman family***

**14:15 Honorary lecture:**

***Prof. Sergey Fomin, University of Michigan***

**Title:** Cluster transformations

**Abstract:** Cluster transformations are a surprisingly ubiquitous family of algebraic recurrences. They arise in diverse mathematical contexts, from representation theory and enumerative combinatorics to mathematical physics and classical geometry (Euclidean, spherical, or hyperbolic). I will present some of the most basic and concrete examples of cluster transformations, and briefly discuss their remarkable properties such as periodicity, integrability, Laurentness, and positivity.

**15:10 Dr. Assaf Hasson, Introducing the recipient of the Noriko Sakurai prize**

**15:15 The 2019 Noriko Sakurai fellowship award ceremony and a lecture**

by ***Dr. Yatir Benari Halevi***, recipient of the Noriko Sakurai fellowship

**Title:** Strongly Dependent Valued Fields

**Abstract:** A valued field is a field together with an ultrametric, much like the field of p-adic numbers. Strongly dependent valued fields are valued fields whose collection of sets definable by first order formulas enjoy a nice model theoretic combinatorial property called strong dependence. A standing conjecture on strongly dependent valued fields is that they must be henselian. We review the notions and the conjecture.

**15:25 Prof. Ariel Yadin, Introducing the recipient of the Hillel Gauchman fellowship**

**15:30 The 2019 Hillel Gauchman excellence scholarship ceremony and a lecture**

by *Mr. Idan Perl*, recipient of the Hillel Gauchman fellowship

**Title:** Harmonic functions on groups

**Abstract :** Harmonic functions are classical objects in the study of mathematical physics. They appear naturally as a solution to certain differential equations, and have far reaching implications in the study of stochastic processes. My research focuses on harmonic functions on groups, an exploration that reveals profound connections between algebraic, geometric and analytic properties of the underlying mathematical structure.

*You are cordially invited*

Professor Miriam Cohen and Professor Ilan Hirshberg