









#### INVESTMENTS IN EDUCATION DEVELOPMENT

# Workshop "Symplectic Systems in Linear-Quadratic Discrete Optimal Control Problems"

## Monday (April 27, 2015)

**13:00-14:00 Prof. Vera Zeidan** (Michigan State University, USA)

Positivity of Linear-Quadratic Discrete Optimal Control problems via the positivity of the corresponding Quadradic Functional associated to its Symplectic system

### 14:00-16:00 Discussion

- Symplectic systems and Weyl-Titchmarsh theory (R. Šimon Hilscher, P. Zemánek)
- Trigonometric symplectic systems (O. Došlý)
- Recessive solutions for symplectic difference systems (P. Šepitka)
- Nonlinear dependence on spectral parameter in symplectic systems (R. Šimon Hilscher)
- Linear-quadratic regulator and symplectic systems (R. Šimon Hilscher, V. Zeidan)

## Tuesday - Thursday (April 28-30, 2015)

Personal consultations or joint discussions

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