

05-06 DECEMBER 2019

CAMPUS WU  
VIENNA UNIVERSITY OF  
ECONOMICS AND BUSINESS

BUILDING AD, CONFERENCE ROOM 1  
WELTHANDELSPLATZ 1, 1020 VIENNA

VIENNESE VINTAGE WORKSHOP ON

# HETEROGENEOUS DYNAMIC MODELS OF ECONOMIC AND POPULATION SYSTEMS

The Viennese Vintage Workshop is organised by the Vienna University of Technology, in particular the Institute of Statistics and Mathematical Methods in Economics (research group Operations Research and Control Systems ORCOS and research group Economics ECON) and the Wittgenstein Centre for Demography and Global Human Capital, in particular the Vienna Institute of Demography (VID) of the Austrian Academy of Sciences (ÖAW).

The workshop is supported by the Austrian Society for Operations Research (ÖGOR), working group for Optimal Control and Dynamic Games.

## THURSDAY, 5 DECEMBER 2019

08:30 – 08:50      **Registration**

08:50 – 09:00      **Opening**

### Session 1

*Chair: Ben Heijdra*

09:00 – 09:30      **Lancker, K.;** Quaas, M.; Tahvonen, O.  
*Vintages of wind turbines*

09:30 – 10:00      **Palokangas, T.**  
*Optimal taxation with endogenous population growth and the risk of environmental disaster*

10:00 – 10:30      **Heijdra, B.J.;** Heijnen, P.  
*Reversible environmental catastrophes with disconnected generations*

10:30 – 11:00      COFFEE BREAK

### Session 2

*Chair: Herbert Dawid*

11:00 – 11:30      **Kort, P.M.;** Hart, R.F.; Wrzaczek, S.  
*Planned obsolescence: a dynamic analysis*

11:30 – 12:00      **Faggian, S.;** Kort, P.M.  
*A dynamic model of the firm with one-hoss shay depreciation*

12:00 – 12:30      **Dawid, H.;** Muehlheusser, G.  
*Smart products: liability, timing of market introduction, and investments in product safety*

12:30 – 14:00      LUNCH BREAK

### Session 3

*Chair: Alexey Davidov*

14:00 - 14:30      **De Frutos, J.;** Lopez, P.; Martin-Herran, G.  
*Analytical characterization of equilibrium strategies in a multiregional transboundary pollution differential game with spatially distributed controls*

14:30 – 15:00      **Augeraud-Veron, E.;** Ducrot, A.  
*Taking into account perception of environmental quality: how space matters?*

15:00 – 15:30      **Davydov, A.**  
*On optimal steady state in the dynamic of exploited population with diffusion*

15:30 – 16:00 COFFEE BREAK

#### Session 4

Chair: Michael Kuhn

16:00 – 16:30 **Freiberger, M.**; Kuhn, M.; Wrzaczek, S.  
*Prepare or react? Integrating large health shocks into life-cycle models*

16:30 – 17:00 **Prettner, K.**; Strulik, H.  
*Innovation, automation and inequality: Policy challenges in the race against the machine*

17:00 – 17:30 **Sánchez-Romero, M.**; Schuster, P.; Prskawetz, A.  
*The impact of introducing a pension sustainability factor on inequality and growth*

17:30 – 18:00 **Kuhn, M.**; Sánchez-Romero, M.  
*Medical progress as a driver of (unequal) life cycle outcomes*

18:30 DINNER

## FRIDAY, 6 DECEMBER 2019

### Session 5

Chair: Fausto Gozzi

- 09:00 – 09:30      **Kühn, C.**  
*Adaptive network dynamics*
- 09:30 – 10:00      **Federico, S.;** Boucekkine, R.; Fabbri, G.; Gozzi, F.  
*Growth and agglomeration in the heterogeneous space: a generalized AK approach*
- 10:00 – 10:30      **Upmann, T.;** Uecker, H.; Hammann, L.; Blasius, B.  
*Optimal stock-enhancement activities for a spatially distributed renewable resource*
- 10:30 – 11:00      **Gozzi, F.**  
*A mean field game approach to economic inequalities across space*
- 11:00 – 11:30      COFFEE BREAK

### Session 6

Chair: Raouf Boucekkine

- 11:30 – 12:00      **Tavhonen, O.;** Quaas, M.  
*Optimal and Markov-perfect Nash equilibria in harvesting age-structured semelparous species*
- 12:00 – 12:30      **Dijk, H.**  
*Health and labor supply over the life cycle: How important is mental health?*
- 12:30 – 13:00      **Boucekkine, R.;** Melindi-Ghidi, P.  
*Particularism, dominant minorities and institutional change*
- 13:00 – 13:45      LUNCH BREAK

### Session 7

Chair: Sebastian Anita

- 13:45 – 14:15      **Fabbri, G.**  
*A spatiotemporal framework for the analytical study of optimal growth under transboundary pollution*
- 14:15 – 14:45      **Yegorov, Y.**  
*Economic geographical model of historical dynamics of countries*
- 14:45 – 15:15      **Anita, S.**  
*Regional control problems for structured population dynamics*
- 15:15                CLOSING OF THE WORKSHOP