BioMATEmatics

An International Conference on Biomathematics and Biostatistics

30 August 2021, Gödöllő, Hungary

Organized by

HUNGARIAN UNIVERSITY OF AGRICULTURE AND LIFE SCIENCES
Institute of Mathematics and Basic Science

PROGRAM OF THE CONFERENCE

9:00-9:15 Opening of the Conference

9:15-9:50 Gergely Röst (University of Szeged, Hungary): The work of the Hungarian COVID-19 Mathematical Modelling and Epidemiological Analysis Task Force

9:50-10:10 Kyeongah Nah (National Institute of Mathematical Sciences, Daejeon, Korea): Dynamical modeling of tick population growth and tick-borne disease transmission with climate projection

10:10-10:30 Yukihiko Nakata (Aoyama Gakuin University, Sagamihara, Japan): On a blow-up phenomenon in scalar delay differential equations

10:30-10:40 Break

10:40-11:00 József Garay (Centre for Ecological Research, Institute of Evolution, Hungary): Sib cannibalism as a mutualism

11:00-11:20 Inmaculada López (University of Almería, Spain): Monitoring in a nonlinear Leslie-type population growth model

11:20-11:40 Márta Ladányi (MATE, Hungary): Long-term effects of conservation tillage on soil erosion in Central Europe: a Random Forest-based approach

11:40-12:00 Attila Dénes (University of Szeged, Hungary): Fleeing lockdown and its impact on the size of epidemic outbreaks in the source and target regions – a COVID-19 lesson

12:00-12:40 Break

12:40-13:00 László Menyhárt (MATE, Hungary): Biodiversity profiles in microbiome research

13:00-13:20 László Székely (MATE, Hungary): On an SIRS model for social contagion

13:20-13:40 Richárd Kicsiny (MATE, Hungary): A novel discrete-time dynamical model for describing the competition among nutrient producing protocells

13:40-13:50 Break

13:50-14:10 Mahmoud A. Ibrahim (University of Szeged, Hungary): A mathematical model for the spread of Varroa mites in honeybee populations: two simulation scenarios with seasonality

14:10-14:30 Tamás Tekeli (University of Szeged, Hungary): Mathematical modelling of the effect of prior dengue infection on the risk of Zika infection

14:30-14:50 Saumen Barua (University of Szeged, Hungary): A seasonal model to assess intervention strategies for preventing periodic recurrence of Lassa fever

14:50-15:10 Péter Boldog (University of Szeged, Hungary): Propensity matrix method for age dependent stochastic infectious disease models

15:10-15:20 Closing of the Conference

The online conference is available at

https://us06web.zoom.us/j/85050386035?pwd=cE9mZThOa214enhheExCenV3TWcrdz09