

International Workshop "From Soft Matter to Protocell 2020"

Online: Zoom Webinar

Program (UTC)

Oct. 28

Chair: Taro Toyota

- 15:00 Opening address: Masayuki Imai
15:05 Peter Walde (ETH)
Emergent properties of vesicles as protocell models
15:55 Yutetsu Kuruma (JAMSTEC)
Construction of artificial photosynthetic cell toward an autonomous system.
16:35 Kate Adamala (U. Minnesota)
Building life to figure out how life started
17:25 Break

Chair: Kate Adamala

- 17:35 Benjamin Rogers (Brandeis University)
Exploring the pathways to self-organization using DNA nanotechnology
18:15 Yusuke Maeda (Kyushu Univ.)
Understanding symmetry breaking induced by cell-sized compartments:
19:05 a minimal cell approach

Oct. 29

Chair: Yutetsu Kuruma

- 15:00 Sheref Mansy (Univ. Alberta)
Prebiotic and biological mimetic protocells
15:50 Dora Tang (MPI-CBG)
Bottom up synthetic cellularity
16:40 Minoru Kurisu (Tohoku University)
Sustainable reproduction of vesicles coupled with surface confined template
polymerization
17:20 Break

Chair: Yusuke Maeda

- 17:30 Taro Toyota (Univ. Tokyo)
Perfusion chamber for observing giant vesicles
18:10 Neal Devaraj (UCSD)
Cell membrane mimetic chemistry
19:00 Closing Remark : Peter Walde