ECT*  
EUROPEAN CENTRE  
FOR THEORETICAL STUDIES  
IN NUCLEAR PHYSICS AND RELATED AREAS  
FONDAZIONE BRUNO KESSLER

Director: Prof. Jochen Wambach  
(Trento and TU Darmstadt)

2020 PROGRAMME OF ACTIVITIES

10-14 FEBRUARY  
Determination of the Effective Electron (Anti-)Neutrino Mass  
Organisers: L. GASTALDO (University of Heidelberg), K. VALVERDE (KIT, Karlsruhe)

24-28 FEBRUARY  
Heavy-Flavor Transport in QCD Matter  
Organisers: R. RAY (Texas A&M University), R. AUBERT (CERN, Darmstadt), X. DONG (UBC, Berkeley), P. GOSSIAUX (Sabatier, Aix-en-Provence), X.-N. WANG (Tsinghua, Beijing)

22-24 MARCH  
Machine Learning for High Energy Physics, on and off the Lattice  
Organisers: A. ATHENOS (Euratom), G. BAUR (National and Kapodistrian University of Athens), B. LUCINI (University of Sydney), E. RINALDI (Theoretical Physics, Tokyo), K. CRAKNER (New York University), C. ALEXANDRU (University of Cyprus)

20-24 APRIL  
New Physics Searches in Heavy Ion Collisions  
Organisers: M. DEMIES (École Polytechnique), D. D’ENTRINA (CERN), A. GIMMICHIO (UCUdine), J. HAIDER (UCUdine)

18-22 MAY  
Nuclear Physics Meets Condensed Matter: Symmetry, Topology, and Gauge  
Organisers: A. GEZERALUS (University of Gauhat), A. ROGGERO (University of Washington), C. SA DE MEL (Georgia Institute of Technology)

25-29 MAY  
Neutron Stars as Multi-Messenger Laboratories for Dense Matter  
Organisers: J. TEYSS (LAM), B. GIORGETTI (University of Milano), S. GUILLOT (Université de Lorraine), J. MAURICHER (UPN Lyon), S. NISSANKE (University of Amsterdam)

08-12 JUNE  
Relativistic Fermions in Flatland: Theory and Application  
Organisers: S. HAND (University of Twente), H. GIES (Friedrich-Schiller-Universität Jena), J. GRACEY (University of Liverpool), I. HENSON (Simon Fraser University)

13-17 JUNE  
Tomography of Light Nuclei at an EIC  
Organisers: A. FRIESE (ANL), W. COSYN (Glenelg University & Florida International University), I. COLET (ANL), P. SAVIANANI (ATL)

22-26 JUNE  
Key Reactions in Nuclear Astrophysics  
Organisers: A. TURINO (University degli Studi di Enna "Kore" & INFN-LNS, Catania), J. JOSE (Technical University of Catalonia), C. BERTULATI (Texas A&M University-Commerce), R. DRIS (CERN, Geneva), L. TRACKE (Forschungszentrum Karlsruhe)

22 JUNE - 10 JULY  
TALENT School:  
Machine Learning applied to Nuclear Physics, Experiment and Theory  
Organisers: M. HORTIN-JENSEN (Michigan State University and University of Oslo), D. BAZIN (Michigan State University), M. KUCHERA (Budapest University), S. LIDSTEIN (Michigan State University), R. RAMANJANU (Budapest University)

06-10 JULY  
Saturation and Diffraction at the LHC and the EIC  
Organisers: C. ROYON (Kavli IPMU, Osaka), A. SARDI VERA (University Autónoma de Madrid), S. SCHULTHES (University of Bielefeld), A. DESHPANDE (Tata Institute of Fundamental Research), G. SOETE (INP, Sophia-Antipolis), M. HENTSCHEL (Universidad de las Americas Puebla)

DOCTORAL TRAINING PROGRAMME:  
High-Energy and Nuclear Physics within Quantum Technologies  
Organisers: P. HERNANDEZ (University of Valencia), S. MONTAGNE (University of Padova), Y. OME (University of Lyon), E. RICO (UPV/EHU, Bilbao)

13-17 JULY  
Probing Nuclear Physics with Neutron Star Mergers  
Organisers: G. FISCHER (LANL & George Washington University), J. LIPVUNER (LANL), M. MNOPF (LANL), A. STERN (University of Tennessee), B. COT (Kavushan Observatory), R. SUOMAN (University of Notre Dame), S. ROSSWOG (Stockholm University)

20-24 JULY  
STRANU: Hot Topics in STRANgeness NUclear and Atomic Physics  
Organisers: K. PASCICINA (Centre Fermi, Roma), C. CUCURCEANU (INFN, Florence), D. GAZDA (Czech Academy of Sciences), E. MONAK (Kurashiki University – RIKEN Keihanna Center, Kobe), P. MOSAL (Johannes Gutenberg University, Koblenz), F. SAKUMA (RIKEN Keihanna Center, Kobe)

07-11 SEPTEMBER  
Theoretical and Experimental Challenges in Flavour Hadrons, Heavy Quarkonia and Multiquark Physics  
Organisers: M. PARRAS (Univ. Valencia), B. BIEBERMANN (Universidade Cearense do Sul), E. SANTORO (INFN, Genoa), E. EPLEKOV (Rhu-Universitat Bonn), A. BASHER (University Muelhousean de San Nicolas de Hidalgo)

28 SEPTEMBER – 02 OCTOBER  
Exploring High-Mu Matter With Rare Probes  
Organisers: E. SOCAPPARIN (INFN, Turin), T. GALATIUX (LSG & TU Darmstadt), M.P. LOMBARDO (INFN, Florence), R. RAY (Texas A&M University), G. UZAI (University of Cagliari & INFN)

05-09 OCTOBER  
Spin and Hydrodynamics in Relativistic Nuclear Collisions  
Organisers: F. BUCATTINI (University of Florence & INFN), W. FLOROWSKI (Johannes Gutenberg University, Koblenz), X.-G. HUANG (Fudan University), D. RISEN (Goethe-Universität Frankfurt)

12-16 OCTOBER  
LFC20: Strong Interactions from QCD to New Strong Dynamics at LHC and Future Colliders  
Organisers: G. CORSICCA (INFN, Padova), S. DE CURTIS (INFN, Florence), S. MONTIEL (University of Southampton), G. PANICHE (INFN, Padova), R. TENCCHAR (INFN, Padova), M. VOS (IFIC, Valencia)

26-30 OCTOBER  
Nuclear and Atomic Transitions as Probes for High Precision Tests of Quantum Gravity Inspired Models  
Organisers: A. MARCIANO (Fudan University), S. ALEXANDER (Brown University, Providence), E. BARBERIO (University of Michigan), C. CUCURCEANU (INFN, Padova), K. PASCICINA (Centre Fermi, Roma), N. YINUS (University of Athens at Athens-Chania)

02-06 NOVEMBER  
Advances in Many-Body Theories: From First Principle Methods to Quantum Computing and Machine Learning  
Organisers: H. HORTIN-JENSEN (Michigan State University and University of Oslo), D.J. DEAN (ORNL, Oak Ridge), T. PAPENBROCK (University of Tennessee & ORNL, Oak Ridge), M. SAVAGE (INT & University of Washington), G. HAGEN (ORNL, Oak Ridge), S. GANDOLFI (LANL), J. HOLT (TRIUMF, Vancouver)

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