European Centre for Theoretical Studies in Nuclear Physics and Related Areas

Jochen Wambach
ECT* & TUDa

Scientific Board News
Scientific Activities 2016
Research @ ECT*
Budget
# International Scientific Board of ECT*

(status June, 2016)

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Gert Aarts</td>
<td>Univ. of Swansea</td>
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<tr>
<td>Omar Benhar</td>
<td>INFN Rome</td>
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<td>Angela Bracco (NuPECC)</td>
<td>Univ. of Milano</td>
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<td>Paul-Henri Heenen</td>
<td>Univ. Libre de Bruxelles</td>
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<td>Judith McGovern</td>
<td>Univ. of Manchester</td>
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<td>Ubirajara van Kolck</td>
<td>CNRS - INP Orsay</td>
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<td>Piet Mulders (Chair)</td>
<td>Free Univ. of Amsterdam</td>
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<tr>
<td>Sanjay Reddy</td>
<td>INT &amp; Univ. Washington, Seattle</td>
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<tr>
<td>Johanna Stachel</td>
<td>Univ. Heidelberg</td>
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- **J. Stachel** (U. Heidelberg): term ends June 2016
- Two additional Board members nominated:
  - Dirk Rischke, Goethe Univ. Frankfurt
  - Nicole d’Hose, CEA Saclay
  - approved by NuPECC and FBK
ECT* Scientific events 2016

- 18 accepted Workshops (out of 24 proposals)

- ECT* Doctoral Training Program:
  “Nuclear, Neutrino and Relativistic Astrophysics”
  organized by Sanjay Reddy, INT

Related Areas:
High-Energy Particle Physics
Condensed Matter Physics
Quantum Many-Body Systems
Interdisciplinary Projects

ECT*, Trento, Italy

www.ectstar.eu
Workshops so far this year

Spectroscopy of resonances in QCD
Feb 8 - 12, 2016
Organizers
Ulf-G. Meißner (Universität Bonn & FZ Jülich)
Klaus Peters (GSI Darmstadt / GU Frankfurt)
Ulrich Wiedner (Universität Bochum)

New Observables in quarkonium production
Feb 29 – Mar 4, 2016
Organizers
Torsten Dahms (Technische Universität München)
Elena G. Ferreiro (Universidade de Santiago de Compostela)
Jean-Philippe Lansberg (CNRS/IN2P3 IPNO Orsay)
Cristian Pisano (Universiteit Antwerpen)

Determination of the absolute electron (anti)-neutrino mass
Apr 4 – 8, 2016
Organizers
Loredana Gastaldo (Universität Heidelberg)
Kathrin Valerius (Karlsruhe Institute of Technology)

Parton transverse momentum distributions at large x
Apr 11 – 15, 2016
Organizers
Alessandro Bacchetta (INFN Pavia and Pavia University)
Jian-Ping Chen (Jefferson Lab)
Hayan Gao (Duke University)
Zein-Eddine Meziani (Temple University)
Paul Souder (Syracuse University)

Probing transverse nucleon structure at momentum transfer
Apr 18 – 22, 2016
Organizers
Evaristo Cisbani (INFN Rome)
Ian Cloet (Argonne National Laboratory)
David Hamilton (University of Glasgow)
Seamus Riordan (Stony Brook University)
Bogdan Wojtsekhowski (Jefferson Lab)

Advances in transport and response properties of strongly interacting systems
May 2- 6, 2016
Organizers
Yannis Burnier (EPFL)
J.W. Holt (Texas A&M and University of Washington - Seattle)
Alessandro Lovato (ANL)
Alessandro Roggero (INT & Univ. of Washington)

Equation of state of quantum many-body systems
May 30 – June 1, 2016
Organizers
S. Giorgini (BEC Center and University of Trento)
Markus Holzmann (Université Grenoble)
Francesco Pederiva (University of Trento)
G. Roati (INO-CNR and LENS Florence)

Towards consistent approaches for nuclear structure and reactions
Jun 6 -11, 2016
Organizers
Carlos Bertulani (Texas A&M University-Commerce)
Guillaume Blanchon (CEA - DAM - DIF)
Gregory Potel (Lawrence Livermore National Laboratory)
Vittorio Soma (CEA Saclay)
ECT* Doctoral Training Program 2016

“Nuclear, Neutrino and Relativistic Astrophysics”
organized by Sanjay Reddy, INT
student coordinator Georges Ripka, Saclay

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<tr>
<th>Week</th>
<th>Lecturer</th>
<th>Topic</th>
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<tr>
<td>June 06 - 10</td>
<td><strong>Baha Balantekin</strong> (University of Wisconsin-Madison, USA)</td>
<td>&quot;Neutrinos in astrophysics and cosmology&quot;</td>
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<td>June 13 - 17</td>
<td><strong>Alexander Heger</strong> (Monash University, Australia)</td>
<td>&quot;Stellar evolution and explosions&quot;</td>
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<td>June 20 - 22</td>
<td><strong>Thomas Janka</strong> (Max-Planck-Institut für Astrophysik, Garching, Germany)</td>
<td>&quot;Supernova theory&quot;</td>
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<td>June 22 - 25</td>
<td><strong>Paolo Mazzali</strong> (Astrophysics Research Institute, Liverpool University, UK)</td>
<td>&quot;Observations of core-collapse supernovae&quot;</td>
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<tr>
<td>June 27 - July 1</td>
<td><strong>Sanjay Reddy</strong> (University of Washington, USA)</td>
<td>&quot;Neutron stars and dense matter&quot;</td>
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<td>July 04 - 08</td>
<td><strong>Bruno Giacomazzo</strong> (University of Trento, Italy)</td>
<td>&quot;Neutron star mergers and gravitational waves&quot;</td>
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<tr>
<td>July 11 - 15</td>
<td><strong>Friedel Thielemann</strong> (University of Basel, Switzerland)</td>
<td>&quot;Nucleosynthesis&quot;</td>
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Senior Research Associates

Daniele Binosi  (SRA - Italy)  
Gauge Field Theories; QCD
Dionysis Triantafyllopoulos  (SRA - Greece)  
QCD, Collider Physics, Strong Coupling Gauge Th.
Alexis Diaz-Torres  (SRA - Cuba / Germany)  
Nuclear Structure & Reactions; Nuclear Astrophysics

Postdocs

Guillaume Beuf  (PD - France)  
QCD, Collider Physics
Maria Gomez Rocha  (PD - Spain)  
Hadron Physics, Quarkonia
Chen Ji  (PD - China)  (ECT*/TIFPA)  
Nuclear Few-body Effective Field Theories, Cold Atoms
Arno Tripolt  (PD - Germany)  
Finite T Field Theory, Hot Matter
Jesus Casal Berbel  (PD - Spain)  (Oct 2016)  
Low-Energy Nuclear Theory

+ 5 ECT* - LISC Researchers
Interdisciplinary Laboratory for Computational Science
Research Unit of ECT* since Jan 2015
Based on MoU signed by EJFRC (ECT* Joint Finance Review Committee) and Protocols of Agreement (Oct. 2014) with contributing countries

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>PAYMENT REQUEST SENT</th>
<th>CONTRIBUTION ASKED FOR</th>
<th>RECEIVED ON</th>
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<tbody>
<tr>
<td>Belgium FWO (Flemish)</td>
<td>March 30</td>
<td>10,000</td>
<td></td>
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<tr>
<td>Belgium FNRS</td>
<td>March 30</td>
<td>10,000</td>
<td>4/21/16</td>
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<tr>
<td>Czech Republic</td>
<td>March 30</td>
<td>10,000</td>
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<tr>
<td>Finland</td>
<td>March 30</td>
<td>8,000</td>
<td></td>
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<tr>
<td>France CEA (Saclay)</td>
<td>March 30</td>
<td>35,000</td>
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<tr>
<td>France CNRS</td>
<td>March 30</td>
<td>65,000</td>
<td>5/25/16</td>
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<tr>
<td>Germany</td>
<td>prepaid</td>
<td>100,000</td>
<td>1/1/16</td>
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<tr>
<td>Hungary</td>
<td>March 30</td>
<td>2,000</td>
<td>4/21/16</td>
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<td>Italy (INFN)</td>
<td>March 30</td>
<td>100,000</td>
<td>5/18/16</td>
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<td>Netherlands</td>
<td>March 30</td>
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<td>5/31/16</td>
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<td>Poland</td>
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<td>4/28/16</td>
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<td>Romania</td>
<td>March 30</td>
<td>6,000</td>
<td>6/13/16</td>
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<td>UK</td>
<td>March 30</td>
<td>26,000</td>
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<td><strong>Received so far:</strong></td>
<td></td>
<td><strong>301,000</strong></td>
<td></td>
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<td><strong>Total (expected):</strong></td>
<td></td>
<td><strong>390,000</strong></td>
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next EJFRC meeting September 12, 2016
Annual Running Budget 2016 (tentative)

- **Total**: 1.03 M€

### Self-supported activities
- Belgium, Czech Republic, Finland, Hungary, the Netherlands, Poland, Romania, United Kingdom, USA

### Supporting Institutions
- FBK
- ENSAR2
- ECT*
- ESF-POLATOM
- INFN
- TIFPA
- BEC
- GOETHE UNIVERSITY FRANKFURT AM MAIN
- FONDAZIONE BRUNO KESSLER
- CNRS
- IN2P3
- CEA
- Bundesministerium für Bildung und Forschung
- EMMI
- QIPC in Europe

### Countries
- Italy 0.13
- Germany 0.13
- France 0.11
- Others 0.11
- EU etc. 0.09
- Self-supported activities
FBK contribution to ECT* stable at 480 k€ in 2016 but cuts in 2017

Additional indirect INFN contribution (TIFPA postdoc) to ECT* in 2016

EU projects: ECT* as TNA (Transnational Access) Facility:
- ENSAR2 (ECT*: 229 k€ for 4 years) - started March 1, 2016
- HadronPhysicsHorizon - new targeted application
  effective 2016 / 17 (if successful)

Denmark stopped payments from 2015 onward.
No contributions from Norway and Sweden
(i.e. Finland remains the only Nordic country contributing to ECT*)

No contributions from Austria, Greece, Portugal, Spain, Switzerland