

ECT* Workshop Proposal

Project title:

Exploring the role of electro-weak currents in Atomic Nuclei

Organizers

Stefano Gandolfi (LANL)

Ronald Fernando Garcia Ruiz (CERN/The University of Manchester)

Gaute Hagen (ORNL/The University of Tennessee)

Jason Holt (TRIUMF)

Alexandre Obertelli (Darmstadt)

Expected number of participants

28

Program Outline

April 23-27, 2018

The workshop program will consist of about 30 plenary presentations from invited speakers. For each talk we have allocated 45 minutes, which include a 30 minutes presentation and 15 minutes are reserved for questions and discussions. The scientific program will start at 10 am on Monday 23th, and will end at 15:00 on Friday 27th. The participants and titles of the talks are presented below.

[Welcome](#)

23/04/2018, 10:00

[Electro-weak currents from chiral-EFT](#)

Evgeny Epelbaum (Ruhr-Universität Bochum)

23/04/2018, 10:25

[QMC computations of weak decays in light nuclei](#)

Rocco Schiavilla (JLAB)

23/04/2018, 11:40

[The proton radius](#)

Sick Ingo (University of Basel)

23/04/2018, 13:55

[Short Range Correlations and the EMC Effect in Effective Field Theory](#)

Joel Lynn (TU Darmstadt)

23/04/2018, 14:40

[Low-energy Electro-weak Reactions](#)

Doron Gazit (Hebrew University)

23/04/2018, 15:55

[Effects of many-body currents in dark matter detection and WIMP-nucleus scattering](#)

Achim Schwenk (TU Darmstadt)

24/04/2018, 10:00

[Electromagnetic and neutral-weak response of light nuclei](#)

Alessandro Lovato

24/04/2018, 11:15

[Opportunities for electron scattering experiments with exotic nuclei](#)

Toshimi Suda (Tohoku University)

24/04/2018, 14:00

[Electromagnetic Nuclear Responses](#)

Sonia Bacca (TRIUMF / TU Darmstadt)

24/04/2018, 14:45

[Electroweak reactions in light nuclei](#)

Nir Barnea (Hebrew University)

24/04/2018, 16:00

[Two-body currents and weak decays in light nuclei](#)

Petr Navrátil (TRIUMF)

24/04/2018, 16:45

[Electromagnetic response and weak decays in light nuclei](#)

Saori Pastore (LANL)
25/04/2018, 10:00

[Nuclear ground-state electrostatic properties](#)

Kieran Flanagan (The University of Manchester)
25/04/2018, 11:15

[Effective g-factors and their interpretations in nuclear structure](#)

Gerda Neyens (CERN / KU Leuven)
25/04/2018, 14:00

[The Bohr-Weiskopf Effect and the Nuclear Magnetization Radius](#)

Mark Bissell (The University of Manchester)
25/04/2018, 14:45

[Testing the role of many-body currents in medium mass and heavy nuclei](#)

Jason Holt (TRIUMF - Vancouver)
25/04/2018, 16:00

[Neutrino-less double beta decay experiments](#)

Reyco Henning (University of North Carolina Chapel Hill)
26/04/2018, 10:00

[Precision Penning-trap measurements for fundamental studies](#)

Klaus Blaum
26/04/2018, 11:15

[Double Gamow-Teller resonances and their relation to \$0\nu\beta\beta\$](#)

Javier Menendez (Tokyo University)
26/04/2018, 14:00

[Two-body currents and their role in light nuclei](#)

Kyle Wendt (LLNL)
26/04/2018, 14:45

[Effective theory approach to neutrino less double beta decay](#)

Vincenzo Cirigliano (LANL)
26/04/2018, 16:00

[Nucleon correlations in neutrino oscillation experiments](#)

Teppei Katori (University of London)
27/04/2018, 10:00

[Direct Dark Matter Detection with XENON](#)

Junji Naganom (Rice University)
27/04/2018, 11:15

[Coupled-cluster computations of weak decays](#)

Gaute Hagen (UTK / ORNL)
27/04/2018, 14:00

[Concluding remarks](#)

27/04/2018, 14:45