

Precise beta decay calculations for searches for new physics

Monday 08 April 2019

09:30-10:10 Registration - ECT*

10:10-10:50 Welcome - GAZIT, Doron

10:50-11:20 Coffee

11:20-12:10 Calculations of beta spectra - HAYEN, Leendert

12:10-13:00 Searches for new physics via beta spectra - NAVILIAT-CUNCIC, Oscar

13:00-14:30 Lunch

14:30-15:20 Status of ab-initio calculations - GANDOLFI, Stefano

15:20-16:10 TPCs for beta decays - HEN, Or

16:10-16:40 Coffee

16:40-17:30 Neutron and Mirror decays - YOUNG, Albert

18:00-19:30 Reception

Tuesday 09 April 2019

09:30-10:10 Questions for the day – RAMSEY-MUSOLF, Michael

10:10-10:50 Radiative corrections to nuclear decays - GORSHTYEN, Misha

10:50-11:20 Coffee

11:20-12:00 Dispersive evaluation of the inner radiative correction - SENG, Chien Yeah

12:00-12:40 EFT approach to radiative corrections - ANDO, Shung-Ichi

12:40-14:00 Lunch

14:00-14:50 Outlook for experiments on ν_{ud} - MELCONIAN, Dan

14:50-15:40 Future of radiative correction calculations - RAMSEY-MUSOLF, Michael

15:40-16:10 *Coffee*

16:10-16:50 Relativistic approach to beta decay - TAIOLI, Simone

16:50-17:30 Next-to-leading order contributions - DELEON, Hilla

Wednesday 10 April 2019

09:00-09:50 BSM searches and beta decay - CIRIGLIANO, Vincenzo

09:50-10:40 BSM operators in calculations for WIMPs, Onubb, and lessons for beta decays
- SCHWENK, Achim

10:40-11:10 *Coffee*

11:10-11:50 Explicit forms of operators for recoil-order corrections - GLICK-MAGID, Ayala

11:50-12:30 Reactor Spectra - HAYEN, Leendert

12:30-13:10 Nuclear-structure theory and nuclear shape corrections - GAZIT, Doron

13:10-14:40 *Lunch*

Free afternoon

Thursday 11 April 2019

09:30-09:50 Questions for the day

09:50-10:30 Few-body weak captures accounting for uncertainties - PLATTER, Lucas

10:30-11:00 *Coffee*

11:00-11:40 Many-body currents in the analysis of precision experiments - PASTORE, Saori

11:40-12:20 Coupled-cluster and LIT for beta decay - BACCA, Sonia

12:20-12:40 Electroweak reactions on the deuteron - ACHARYA, Bijaya

12:40-14:00 *Lunch*

14:00-14:40 Beta decay with the valence-space IMSRG --- what works, what doesn't and what kind of precision can we expect? - STROBERG, Ragnar

14:40-15:20 Coupled cluster calculations of beta decays - HAGEN, Gaute

15:20-16:00 Shell-model calculations: capabilities, limitations and uncertainties -
MENENDEZ, Javier

16:00-16:30 *Coffee*

16:30-17:10 Large-scale diagonalization and low-momentum scales of finite nuclei -
FORSSÉN, Christian

19:00-20:30 *Workshop dinner*

Friday 12 April 2019

09:40-10:20 Bayesian uncertainties - PHILLIPS, Daniel

10:20-10:40 UQ Q&A

10:40-11:10 *Coffee*

11:10-12:00 Beta decays with traps - RON, Guy

12:00-12:50 Overview and future of BSM within nuclear physics: neutrino-less $2\nu\beta\beta$, WIMPS
- ENGEL, Jonathan

12:50-13:20 Summary and next steps - GAZIT, Doron

13:20-14:50 *Lunch and end of workshop*