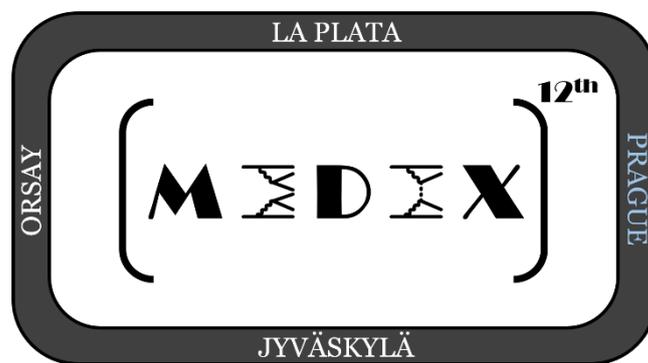


# 12<sup>TH</sup> MEDEX'19

*Prague, Czech Republic*

*May 27 - 31, 2019*



May 27 – 31, 2019

**May 27<sup>th</sup>, 2019 (Balling Hall)**

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
Chair: <i>O. Civitarese</i>		
<b>08:30 – 09:15</b>		<b>REGISTRATION</b>
09:15 – 09:30	<b>Organizers</b>	<b>Opening of the MEDEX'19 workshop</b>
09:30 – 10:00	1. F. Simkovic	Theory Challenges in Neutrinoless Double Beta Decay
10:00 – 10:30	2. J. Suhonen	Neutrino-nuclear responses and the value of the weak axial coupling
10:30 – 11:00	Coffee break	
11:00 – 11:30	3. M. Horoi	Neutrinoless Double Beta Decay of Atomic Nuclei
11:30 – 12:00	4. J. Meng	Nuclear matrix element of neutrinoless double- $\beta$ decay: Relativity and short-range correlations
12:00 – 12:30	5. V. Cirigliano	Effective field theory approach to neutrinoless double beta decay
12:45 – 14:15	Lunch	
Chair: <i>K. Zuber</i>		
14:15 – 14:45	6. A. Barabash	Average and recommended half-life values for two-neutrino double beta decay: upgrade-2019
14:45 – 15:15	7. I. Ostrovskiy	Neutrinoless double beta decay search with EXO: EXO-200 results and status of nEXO
15:15 – 15:45	Coffee break	
15:45 – 16:15	8. A. Smolnikov	GERDA searches for $0\nu\beta\beta$ and other $\beta\beta$ decay modes of $^{76}\text{Ge}$
16:15 – 17:00		<b>Round-Table Discussion</b> (Leader: S. Stoica)

**May 28<sup>th</sup>, 2019 (Balling Hall)**

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
<i>Chair: F. Simkovic</i>		
09:00 – 09:30	9. J. Kotila	Nuclear Physics of Non-Standard Neutrinoless Double Beta Decay
09:30 – 10:00	10. N. Hinohara	Efficient QRPA calculation for two-neutrino double-beta decay nuclear matrix element
10:00 – 10:30	11. H. Ejiri	Experimental studies of axial-vector weak couplings for double beta decays by nuclear and muon reactions
10:30 – 11:00	Coffee break	
11:00 – 11:30	12. F. Deppisch	More than Exotic Neutrinoless Double Beta Decay with Majoron-like Emission
11:30 – 12:00	13. M. Hirsch	Double beta decay beyond the mass mechanism
12:00 – 12:30	14. S. Stoica	Investigation of Lorentz violation in double-beta decay
12:45 – 14:15	Lunch	
<i>Chair: A. Barabash</i>		
14:15 – 14:45	15. L. Pagnanini	Results of the CUPID-0 Phase I experiment
14:45 – 15:15	16. G. Benato	Status and results of the CUORE experiment
15:15 – 15:45	Coffee break	
15:45 – 16:15	17. L. Hayen	First forbidden transitions in the reactor antineutrino anomaly
16:15 – 17:00		<b>Round-Table Discussion</b> (Leader: O. Civitarese)

**May 29<sup>th</sup>, 2019 (Balling Hall)**

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
<i>Chair: J. Suhonen</i>		
09:00 – 09:30	18. J. Terasaki	Reliability of QRPA approach to $\beta\beta$ and $\beta$ decays
09:30 – 10:00	19. O. Civitarese	Matrix elements for the muon to electron conversion revisited
10:00 – 10:30	20. D. Fang	Double beta decay nuclear matrix elements from deformed QRPA calculations with realistic forces
10:30 – 11:00	Coffee break	
11:00 – 11:30	21. M. Shirchenko	Ordinary muon capture studies as an opportunity for DBD calculations
11:30 – 12:00	22. D. Zinatulina	Muon capture in Mo-100/Mo-nat and Ru-nat
12:00 – 12:30	23. L. Jokiniemi	Nuclear responses for double beta decay and muon capture
12:45 – 14:15	Lunch	
<i>Chair: F. Danevych</i>		
14:15 – 14:45	24. Vi. Tretyak	Investigation of Mo-100 two-neutrino double beta decay in NEMO-3
14:45 – 15:15	25. K. Zuber	Status of the COBRA experiment and related topics
15:15 – 15:45	Coffee break	
15:45 – 16:15	26. F. Cappuzzello	Recent results on heavy-ion induced reactions of interest for neutrinoless double beta decay at INFN-LNS
16:15 – 17:00		<b>Round-Table Discussion</b> (Leader: H. Ejiri)
<b>19:00</b>	<b>BANQUET</b>	

**May 30<sup>th</sup>, 2019 (Balling Hall)**

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
Chair: <i>M. Hirsch</i>		
09:00 – 09:30	27. L. Graf	Particle Physics of Non-Standard Neutrinoless Double Beta Decay
09:30 – 10:00	28. A. Smetana	Low-scale seesaw from neutrino condensation
10:00 – 10:30	29. A. Babic	On the Generation of Majorana Neutrino Mass via Quark Condensate
10:30 – 11:00	Coffee break	
11:00 – 11:30	30. J. Holt	Ab initio theory for electroweak properties of nuclei
11:30 – 12:00	31. D. Gazda	Quantifying uncertainties in nuclear matrix elements for dark matter searches
12:00 – 12:30	32. J. Kostensalo	Implications of new theoretical calculations on reactor antineutrino and gallium anomalies
12:45 – 14:15	Lunch	
Chair: <i>H. Ejiri</i>		
14:15 – 14:45	33. J.M. Lopez Castano	Recent Results of the Majorana Demonstrator Experiment
14:45 – 15:15	34. Vl. Tretyak	Final results of the Aurora experiment to study double beta decay of $^{116}\text{Cd}$ with enriched $^{116}\text{CdWO}_4$ crystal scintillators
15:15 – 15:45	Coffee break	
15:45 – 16:15	35. N. Rukhadze	Search for $\beta^+\text{EC}$ and $\text{ECEC}$ processes in $^{74}\text{Se}$
16:15 – 17:00		<b>Round-Table Discussion</b> (Leader: A. Barabash)

**May 31<sup>st</sup>, 2019 (Balling Hall)**

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
Chair: <i>A. Smolnikov</i>		
09:00 – 09:30	36. E. Santopinto	Heavy-ion double-charge-exchange and its relation to neutrinoless double- $\beta$ decay
09:30 – 10:00	37. S. Eliseev	Neutrino Mass and High-Precision Penning-Trap Mass Spectrometry
10:00 – 10:30	38. F. Danevych	Precise measurement of two-neutrino double-beta decay of $^{100}\text{Mo}$ with lithium molybdate low temperature detectors
10:30 – 11:00	Coffee break	
11:00 – 11:30	39. O. Polishchuk	New limit on two neutrino electron capture with positron emission in $^{106}\text{Cd}$
11:30 – 12:00	40. D.Kasperovych	Study of double beta decay of $^{150}\text{Nd}$ to the first $0^+$ excited level of $^{150}\text{Sm}$
12:00 – 12:30	41. G. Koroteev	Gamow-Teller Resonances in the solar neutrino capture cross-section and charge-exchange strength function for $^{76}\text{Ge}$ nuclei
12:45 – 14:15	Lunch	End of the conference!