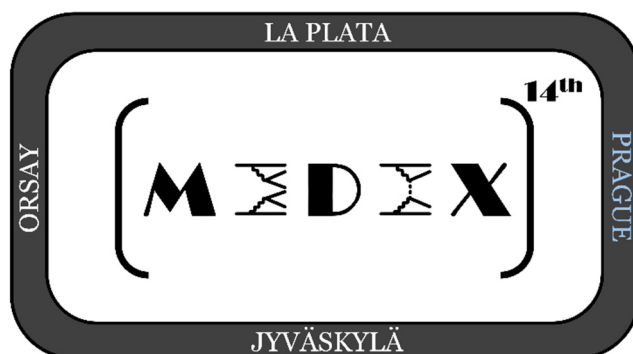


# 14<sup>th</sup> MEDEX'23

*Prague, Czech Republic  
September 4 – 8, 2023*



September 4 – 8, 2023

**September 4, 2023 (Café Louvre Gallery)**

Time	Speaker	Title
<i>Chair: J. Suhonen</i>		
08:45 – 09:30		<b>REGISTRATION</b>
09:30 – 09:45	<b>Organizers</b>	<b>Opening of the MEDEX'23 conference</b>
09:45 – 10:15	1. F. Šimkovic	Novel Aspects of Neutrino oscillations
10:15 – 10:45	Coffee break	
10:45 – 11:15	2. D.-L. Fang	NME for LR symmetric model
11:15 – 11:45	3. T. Kosmas	Testing QED and BSM theories through advanced solutions of the Dirac-Breit-Darwin equations in exotic leptonic atoms
11:45 – 12:15	4. O. Civitarese	On DCX Nuclear Matrix Elements: Shell Model and QRPA results
12:15 – 13:45	Lunch	
<i>Chair: L. Pagnanini</i>		
13:45 – 14:15	5. K. Vetter	Latest results from the CUORE experiment
14:15 – 14:45	6. B. Lenardo	The nEXO search for neutrinoless double beta decay
14:45 – 15:15	7. A. Leoncini	Search for neutrinoless double beta decay in $^{94,96}\text{Zr}$ isotopes using $\text{Cs}_2\text{ZrCl}_6$ crystal scintillators.
15:15 – 15:45	Coffee break	
15:45 – 16:50		<b>Round-Table Discussion</b> (Leader: J. Suhonen)

September 5, 2023 (Café Louvre Gallery)

Time	Speaker	Title
<i>Chair: J. Menendez</i>		
09:15 – 09:45	8. J. Suhonen	Ordinary muon capture, a perfect probe of the $0\nu\beta\beta$ decay
09:45 – 10:15	9. L. Jokiniemi	Ab Initio studies on muon capture
10:15 – 10:45	Coffee break	
10:45 – 11:15	10. S. Stoica	New results from beta and double-beta decays studies
11:15 – 11:45	11. O. Nitescu	Atomic exchange correction for allowed $\beta$ decay and $2\nu\beta\beta$ decay
11:45 – 12:15	12. E. Kauppinen	On the giant resonances of double-beta decay nuclei and NMEs and phase space factors for the double-beta decay of $^{104}\text{Ru}$
12:15 – 13:15	Lunch	
<i>Chair: L. Imbert</i>		
13:15 – 13:45	13. J. Menendez	Shell model neutrinoless double-beta decay matrix elements based on other observables
13:45 – 14:15	14. L. Pagnanini	Final results of the CUPID-0 combined background model
14:15 – 14:45	15. D. Tedeschi	Search for Neutrinoless Double Beta Decay with the MAJORANA DEMONSTRATOR
14:45 – 15:15	16. M. Shirchenko	Status of MONUMENT project
15:15 – 15:45	Coffee break	
15:45 – 16:50		<b>Round-Table Discussion</b> (Leader: J. Menendez)

September 6, 2023 (Café Louvre Gallery)

Time	Speaker	Title
<i>Chair: O. Civitarese</i>		
09:15 – 09:45	17. A. Neacsu	Shell model neutrinoless double-beta decay NME of $^{136}\text{Xe}$ within a statistical approach
09:45 – 10:15	18. J. Terasaki	Cause of discrepancy problem of calculated running sums to NME of $2\nu\beta\beta$ decay
10:15 – 10:45	Coffee break	
10:45 – 11:15	19. L. Graf	Probing Lepton Number Violation at Low and High Energies
11:15 – 11:45	20. M. Ramalho	Looking through the beta spectra
11:45 – 12:15	21. M. Atzori Corona	Probing nuclear and electroweak physics with coherent elastic neutrino nucleus scattering
12:15 – 13:45	Lunch	
<i>Chair: I. Stekl</i>		
13:45 – 14:15	22. P. Loaiza	The CUPID neutrinoless double beta decay experiment
14:15 – 14:45	23. L. Imbert	Spectral shape studies of the $^{100}\text{Mo}$ $2\nu\beta\beta$ decay and the $^{113}\text{Cd}$ $\beta$ decay
14:45 – 15:15	24. A. Leoncini	Low-background experiment to search for double beta decay of $^{106}\text{Cd}$ with enriched $^{106}\text{CdWO}_4$ scintillator
15:15 – 15:45	Coffee break	
15:45 – 16:50	<b>Round-Table Discussion</b> (Leader: O. Civitarese)	
<b>18:00</b>	<b>BANQUET</b>	

September 7, 2023 (Café Louvre Gallery)

Time	Speaker	Title
<i>Chair: F. Šimkovic</i>		
09:15 – 09:45	25. H. Ejiri (online)	Gamma transitions from isobaric analogue states to study NMEs for double beta decays
09:45 – 10:15	26. H. Lenske	Nuclear Matrix Elements from Heavy Ion Double Charge Exchange Reactions
10:15 – 10:45	Coffee break	
10:45 – 11:15	27. T. Papavasileiou	Mathematical formulation of the Dirac, Breit-Darwin equation for purely leptonic atoms
11:15 – 11:45	28. A. Gkrepis	Computational modelling and designing of the advanced DiracBreitDarwinAlgo code
11:45 – 12:15	29. V.-A. Sevestrean	Improved calculations for atomic electron capture ratios
12:15 – 13:45	Lunch	
<i>Chair: P. Loaiza</i>		
13:45 – 14:15	30. D. Ha	A study of $2\nu\beta\beta$ decay of $^{100}\text{Mo}$ to the excited states of $^{100}\text{Ru}$ at AMoRE
14:15 – 14:45	31. B. Schmidt	BINGO: Investigation of the Majorana nature of neutrinos at the few meV level of the neutrino mass scale
14:45 – 15:15	32. L. Pagnanini	ACCESS: research program and preliminary results on the spectral shape of $^{115}\text{In}$
15:15 – 15:45	Coffee break	
15:45 – 16:50	<b>Round-Table Discussion</b> (Leader: F. Šimkovic)	

**September 8, 2023 (Café Louvre Gallery)**

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
<i>Chair: M. Shirchenko</i>		
09:15 – 09:45	33. J. Song	An optimized design of the cryogenic detector for the spectrum shape method to study the $^{99}\text{Tc}$ forbidden $\beta$ decay
09:45 – 10:15	34. H. Hoffmann	Electron capture of $^{76}\text{As}$
10:15 – 10:45	Coffee break	
10:45 – 11:15	35. M. Petropavlova	Constraints on neutrino self-interactions by supernovae and blazars
11:15 – 11:45	36. O. Scholer	vDoBe - A Python Tool for Neutrinoless Double Beta Decay
11:45 – 12:15		<b>Round-Table Discussion</b> (Leader: M. Shirchenko)
12:15 – 13:45	Lunch	
<b>End of the conference!</b>		