

pre-PAC Workshop for AGATA@LNL

Wednesday, 5 October 2022 - Friday, 7 October 2022

INFN-LNL Programme

Wednesday, 5 October 2022

Registration (09:00 - 09:30)

Status and facility updates (09:30 - 11:50), Chair: Andres F. Gadea Raga

09:30	Welcome and introduction by the organisers	VALIENTE DOBON, Jose Javier ZIELINSKA MAGDA
09:40	Acceleratus Status	FAGOTTI, Enrico
10:00	AGATA	CLEMENT, Emmanuel (online)
10:20	Installation of AGATA @LNL	VALIENTE DOBON, Jose Javier
10:40	Physics addressed in the first AGATA@LNL campaign	ZIELINSKA MAGDA

Coffee break (11:00 - 11:30)

11:30	Three-foil plunger	VON SPEE, Franziskus
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Session: Lol 1 (11:50 - 13:30), Chair: Suzana Szilner

11:50	Shell evolution in neutron-rich nuclei south-east of doubly-magic ^{48}Ca	FRANSEN, Christoph (online)
11:50	Lifetime measurements in $^{50-52}\text{Ca}$, $^{46-48}\text{Ar}$, $^{43-45}\text{Cl}$	GOTTARDO, Andrea
12:15	Shape coexistence and mixing in the $N=Z=34$ ^{68}Se	LENZI, Silvia Monica
12:40	Isospin Mixing in the $N=Z=36$ ^{72}Kr : Lifetime measurement of E1 isospin forbidden transitions	ERTOPRAK, Aysegul DE ANGELIS, Giacomo
13:05	Test of the CKM unitarity and the existence of Fierz interference through the measurement of superallowed β decay of light nuclei	HA, Jeongsu (online) RECCHIA, Francesco

Lunch (13:30 - 15:00)

Session: Zero degree workshop: Targets and detectors (15:00 - 16:40), Chair: Giacomo De Angelis

15:00	Zero degree introduction	VALIENTE DOBON, Jose Javier ZIELINSKA MAGDA
15:10	SUGAR	ACOSTA SANCHEZ, LUIS ARMANDO (online)
15:40	CTADIR	GOTTARDO, Andrea
16:10	GRIT	MENGONI, Daniele

Coffee break (16:40 - 17:10)

Session: Zero degree workshop: Detectors and discussion (17:10 - 19:10), Chair: Giacomo De Angelis

17:10	NEDA	GADEA RAGA, Andres F.
17:40	PARIS	MAJ, Adam CAMERA, Franco
18:10	Discussion	

Thursday, 6 October 2022

Welcome address (09:00 - 09:15)

09:00	Welcome by the director of LNL and vice director of UNIPD physics department	<i>F. Gramegna, G. Peruzzi</i>
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Session: Lol 2 (09:15 - 10:55), Chair: Silvia Monica Lenzi

09:15	High Spin Evolution of the doubly midshell nucleus ^{170}Dy	BOSTON, Andrew
09:40	Study of the evolution of deformation and collectivity in tungsten isotopes through lifetime measurements in ^{90}W	PELLUMAJ, Julgen
10:05	Investigating the nature of the low-lying states of ^{196}Os via lifetime measurements	BRUGNARA, Daniele
10:30	Lifetime measurements of ^{202}Pt and ^{206}Hg : Shape evolution towards N=126 closed shell	SEDLÁK, Matúš

Coffee break (10:55 - 11:25)

Session: Lol 3 (11:25 - 13:30), Chair: Andrew Boston

11:25	Lifetime measurements in low-spin states for neutron-rich $^{28,30}\text{Mg}$ via multi-nucleon transfer reactions	AGUILERA, Pablo Antonio
11:50	Intruder configurations toward the Island of Inversion	WIMMER, Kathrin (online)
12:15	Study of shape coexistence in ^{60}Fe via lifetime measurement of excited 0^+ states	PASQUALATO, Giorgia
12:40	Emergence of the enhanced collectivity near magic nuclei: Coulomb excitation of ^{60}Ni	HADYNSKA-KLEK, Kasia ROCCHINI, Marco (online)
13:05	Evolution of deformation along the calcium isotopic chain: Coulomb excitation of ^{44}Ca	BALOGH, Matus (online)

Lunch (13:30 - 15:00)

Session: Lol 4 (15:00 - 16:25), Chair: Andrea Gottardo

15:00	Towards the ^{132}Sn nucleus via lifetime measurements	SICILIANO, Marco (online)
15:25	Emergence of collectivity in neutron-rich Sb isotopes	BOTTONI, Simone
15:35	Anomalously-low $B_{4/2}$ values in neutron-rich Cd isotopes: lifetime measurement of the first 2^+ and 4^+ states in $^{120,122,124,126}\text{Cd}$	ZHANG, Guangxin
16:00	Lifetime measurements in $A \sim 90$ nuclei between the N=Z line and the N=50 shell closure: Limits of seniority symmetry, isoscalar correlations and emergence of collectivity	CEDERWALL, Bo (online)

Coffee break (16:25 - 16:55)

Session: Lol 5 (16:55 - 18:10), Chair: Giovanna Montagnoli

16:55	Nuclear structure studies in the vicinity of the $Z = 28$ neutron-rich isotopes with AGATA and PRISMA	PEREZ VIDAL, Rosa Maria
17:20	The fusion dynamics far below the barrier for $^{12}\text{C} + ^{24}\text{Mg}$ by gamma-particle coincidences with AGATA+Si-detectors	STEFANINI, Alberto
17:45	Probing nucleon-nucleon correlations in the $^{48}\text{Ca} + ^{208}\text{Pb}$ system below the Coulomb barrier	MIJATOVIC, Tea (online)

Workshop dinner (20:30)

Friday, 7 October 2022

Session: Lol 6 (09:15 - 10:55), Chair: Simone Bottoni

09:15	Lifetime of the 6.793 MeV state in ^{15}O	SKOWRONSKI, Jakub
09:40	Lifetime measurements of excited states in neutron-rich ^{16}C and ^{18}C isotopes: a test of the three-body forces	CIEMALA, Michal Lukasz (online)
10:05	Lifetime measurements for the study of intruder states towards the island of inversion along the $N = 20$ shell closure	ZANON, Irene
10:30	Development of deformation in the Island of inversion at $N=20$ AGATA-PRISMA	LENZI, Silvia Monica

Coffee break (10:55 - 11:25)

Session: Lol 7 (11:25 - 12:40), Chair: Simone Bottoni

11:25	Lifetime measurements in neutron-rich Pb isotopes. The role of the effective three-body forces	GONGORA, Benito
11:50	Octupole correlations in the neutron-deficient plutonium isotopes	SMITH, John
12:15	Search for octupole structures in the light U, Th and Pa isotopes via Multinucleon Transfer	DE ANGELIS, Giacomo

Closing discussion (12:40 - 13:05)

12:40	Closing remarks	VALIENTE DOBON, Jose' Javier ZIELINSKA MAGDA
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