

Summary Talk for the 14th Nordic Meeting on Nuclear Physics Longyearbyen, Svalbard 22-25 May 2018

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I've got 20 minutes to summarize 50 talks on nuclear structure, reactions, astrophysics, fission, medical applications...



14th Nordic Meeting on Nuclear Physics / Programme

Thursday 22 May 2018

14th Nordic Meeting on Nuclear Physics

Tuesday 22 May 2018

Session 1 (09:00-10:30)

time	[id] title	presenter
09:00 [52]	Welcome	SIEM, Sunniva
09:10 [53]	Level densities	ÅBERG, Sven
09:30 [40]	New capabilities of the ATLAS facility at Argonne	BLACK, Berger (Argonne National Laboratory)
09:50 [70]	Shape coexistence and isospin symmetry along N=Z	WÄNGBER, Katrien (University of Tokyo)
10:10 [56]	New MARA separator status and first results	SAREN, Jan

Coffee break (10:30-11:00)

Session 2 (11:00-12:30)

time	[id] title	presenter
11:00 [68]	The ESSnUSB conceptual design study	CEDERKALL, Joakim (Lund University (SE))
11:20 [35]	Charged-particle decay studies in the $^3\text{He}^{100}\text{Sn}$ region	AURANEN, K. (Argonne National Laboratory)
11:40 [6]	Reactions with ^9Li beams at HIE-ISOLDE	JENSEN, Jesper Holmgaard (Aarhus University (DK))
12:00 [28]	Studies of the atomic nuclei by the MAGSOL collaboration at ISOLDE and HIE-ISOLDE	TENGBLAD, Olof (Consejo Superior de Investigaciones Científicas (CSIC) (ES))

Lunch (12:30-14:00)

Session 3 (14:00-16:00)

time	[id] title	presenter
14:00 [72]	Delta isobars and nuclear saturation	EKSTRÖM, Anders (Chalmers University of Technology)
14:20 [26]	Recent studies of shell evolution in the $^3\text{He}^{17}\text{O}$ region	SÄMPE, Esa (University of Oulu)
14:40 [34]	Sandbanks beyond the proton drip-line, α -ray bursts and the r -process	SÖDERSTRÖM, Filip-Anders (TU-Darmstadt/RIKENRIKEN)
15:00 [5]	Heavy neutron-rich nuclei	PODOLYAK, Zoltan (University of Surrey)
15:20 [58]	Recent results from CREX and new opportunities at IGISOL	DE GROOTE, Ruben
15:40 [22]	The next order of magnitude in precision and resolution at JYFLTRAP	DI ERONEN, Termini (University of Jyväskylä)

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Poster session: Poster session (16:00-18:00)

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Session 5 (09:00-11:00)

time	[id] title	presenter
09:00 [12]	Recent mass measurements for nuclear structure and astrophysics at JYFLTRAP	Dr KANKKANEN, Anu (University of Jyväskylä)
09:20 [14]	Mass measurements in the vicinity of $^3\text{He}^{17}\text{O}$ at JYFLTRAP	CANETE, Laetitia (University of Jyväskylä)
09:40 [18]	DISCOVERY OF THE NEW ISOTOPES $^3\text{He}^{169}\text{Au}$, $^3\text{He}^{170}\text{Hg}$ AND $^3\text{He}^{169}\text{Pt}$ AND A NEW ISOMER OF $^3\text{He}^{165}\text{Sn}$ USING THE MARA MASS SEPARATOR IN ITS FIRST TRAILBLAZING EXPERIMENT	HILTON, Joshua (University of Jyväskylä)
10:00 [8]	Relative yields of n and antineutrino isotopes in neutron induced fission of ^235U	SÖLDBERS, Andreas (Uppsala University)
10:20 [25]	Finite amplitude method applied to calculation of nuclear photo absorption cross section and rotational moment of inertia	Dr KORTELAINEN, Markus (University of Jyväskylä)

Coffee break (10:40-11:10)

Session 6 (11:10-12:40)

time	[id] title	presenter
11:10 [23]	New progress on microscopic nuclear inputs for astrophysics applications	Ms CORNÉLY, Stéphanie (Université Libre de Bruxelles)
11:30 [43]	Experimental photoneuclear cross sections	FURMYR, Frida (Department of Physics, University of Oslo)
11:50 [53]	(Themba LABS – opportunities in nuclear science and applications	Dr WIEDEKING, Mathis (Themba LABS)
12:10 [38]	Optical spectroscopy for nuclear and atomic science at JYFL	Prof. MOORE, Iain (University of Jyväskylä)

Lunch (12:40-14:00)

Session 7 (14:00-16:00)

time	[id] title	presenter
14:00 [33]	Intermediate-energy Coulomb excitation of ^{72}Ni	MODAMIO, Victor (University of Oslo)
14:20 [4]	Lifetimes of nuclear states in proton-emitting nuclei from Differential Plunger measurements.	CULLEN, David Matthew (University of Manchester (GB))
14:40 [30]	The Orsay Universal Plunger System – past, present, and future	Dr LUNGVALL, Joa (CSNSM)
15:00 [22]	In-beam γ -ray measurement of Pb-184	OJALA, Jounas Kalevo (University of Jyväskylä (FI))
15:20 [20]	Super-FRS contributions from Finland	Dr GRAHN, Tuomas

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Friday 25 May 2018

Session 11 (09:00-11:15)

time	[id] title	presenter
09:00 [66]	The SIBEX-Orb Method	GUTTFORMSJEN, Magne (Department of Physics, University of Oslo, Norway)
09:30 [39]	Effect of angular momentum selectivity of the beta-Orb method	BLEUEL, Damien (Lawrence Livermore Nat. Laboratory (US))
09:40 [38]	The African Lab Array - ALBA	HELLEGRÉ, Louis (University of the Witwatersrand and Themba LABS)
10:00 [48]	Decomposition of Proton Strength and Level Density	Dr FRESTONE, RICHARD (University of California, Berkeley)
10:20 [71]	Particle-core coupling in deformed nuclei: odd-A and doubly even-A elements	WOOD, John
10:40 [54]	Summary talk	

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Thursday 24 May 2018

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Session 8 (09:00-10:40)

time	[id] title	presenter
09:00 [61]	Fission dynamics with microscopic level densities	RANDRUP, Jørgen
09:20 [9]	Measurements of prompt-fission neutrons in $^3\text{He}^{235}\text{U}/\text{vL}_{\text{th}}(0.5\text{f})$ and $^3\text{He}^{235}\text{U}(0.5\text{f})$	AL-ADILI, Ali (Uppsala University, Department of Physics and Astronomy)
09:40 [62]	First actinide experiment with OSCAR	GJESTVANG, Dorthea
10:00 [13]	Development of PPACs for neutron-induced fission cross-section measurements	TARRIO, Diego (Uppsala University)
10:20 [24]	Interplay between single-particle and collective degrees of freedom in heavy nuclei	HAUSCHILD, K. (CSNSM, IMP3-CNRS, UMR8609, F-91405 Orsay, France)

Coffee break (10:40-11:10)

Session 9 (11:10-12:40)

time	[id] title	presenter
11:15 [46]	Isotope production cross section measurements at the HFNG, LANL-IPF, and LBNL	VOYLES, Andrew (UC Berkeley (US))
11:35 [11]	ISOL-BASED EXOTIC NUCLEI IN POROUS SILICON FOR SIMULTANEOUS DIAGNOSTICS AND RADIOTHERAPY	JAKOBSSON, Elin Helen Ulrika (Helsinki Institute of Physics (FI))
11:55 [2]	THE FOOT Experiment	SHIBATA, Shoji (Institute of Energy and Environment (INFN, Bologna (IT))
12:15 [18]	Comparison of ease of use of software tools for use in dose rate calculations	MURPHY, Daniel (Institute for Energy Technology)

Lunch (12:40-14:00)

Session 10 (14:00-16:35)

time	[id] title	presenter
14:00 [69]	Observation of the ground state transition in the beta decay of $^3\text{He}^{20}\text{SF}$	KIRSEBOM, Oliver
14:25 [19]	Detailed R-matrix analysis of $^7\text{Li}(p,\alpha)\text{He}$ at 414keV	MUNCH, Michael Kalmback (Aarhus University (DK))
14:45 [67]	The Inverse-Oslo method	Ms INSEBERG, Vede Wagner (University of Oslo (NO))
15:05 [29]	THE MONSTER neutron detector array	Dr RENTTILÄ, Heikki (University of Jyväskylä) ON BEHALF OF MONSTER COLLABORATION
15:25 [15]	Measurements of isotopic yield ratios in proton-induced fission of $^3\text{He}^{238}\text{U}/\text{vL}_{\text{th}}(0.5\text{f})$ by the Phase-Imaging Ion-Cyclotron-Resonance (PI-ICR) technique	RAKOPOLLOS, Vasilios (Uppsala University)

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Excursion with conference dinner (19:00-00:00)

15:45 [45] Nuclei: from Fundamental Interaction to Structure and Stars. Spectroscopy with AGATA and future perspectives with SPES

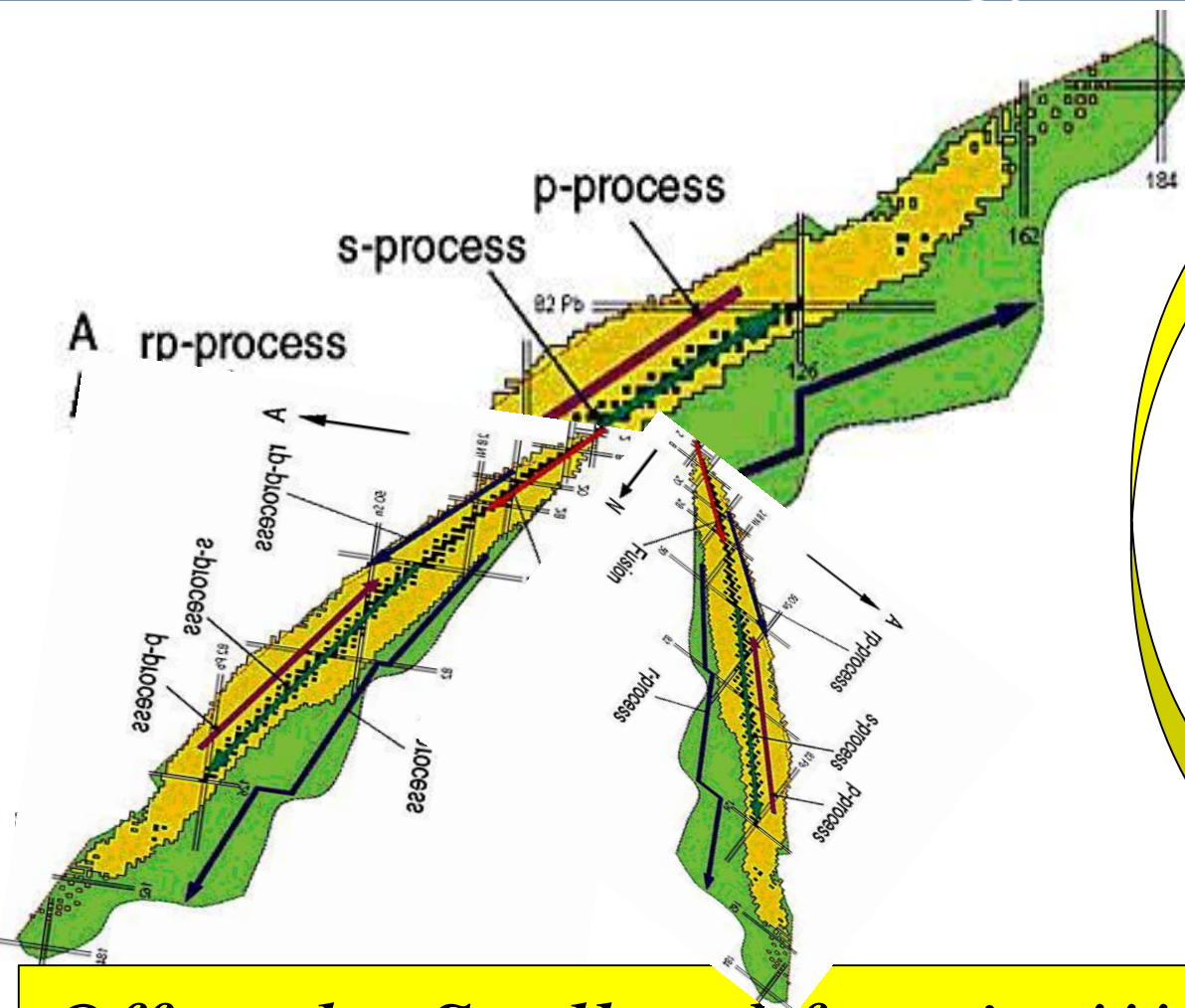
Prof. DE ANGELIS, Giacomo (INFN LNL)

OK. Here goes...

That's it! Bye folks!

Scandinavian researchers are working on the frontier of low-energy nuclear physics

Coincidence???



Off to the Svalbard frontier!!!

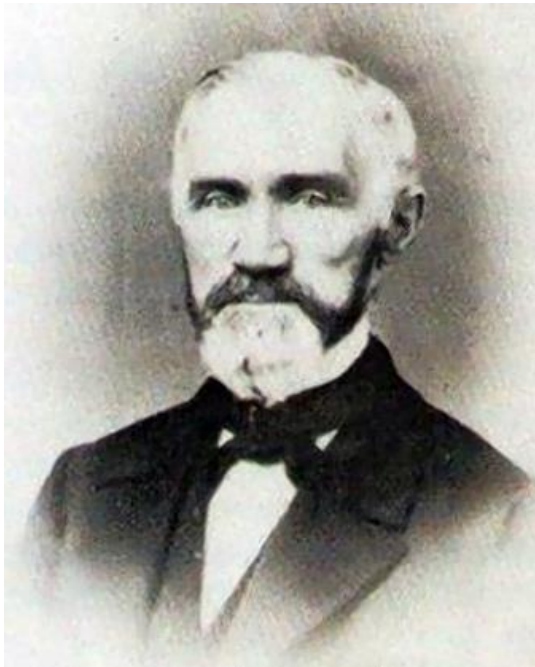
And Svalbard belongs to the bold!



Thanks to the INTPART program for bringing the young people of Berkeley & Oslo together



Berkeley has deep Scandinavian roots



Peder Sæther (Norway)
UC – Berkeley Founder



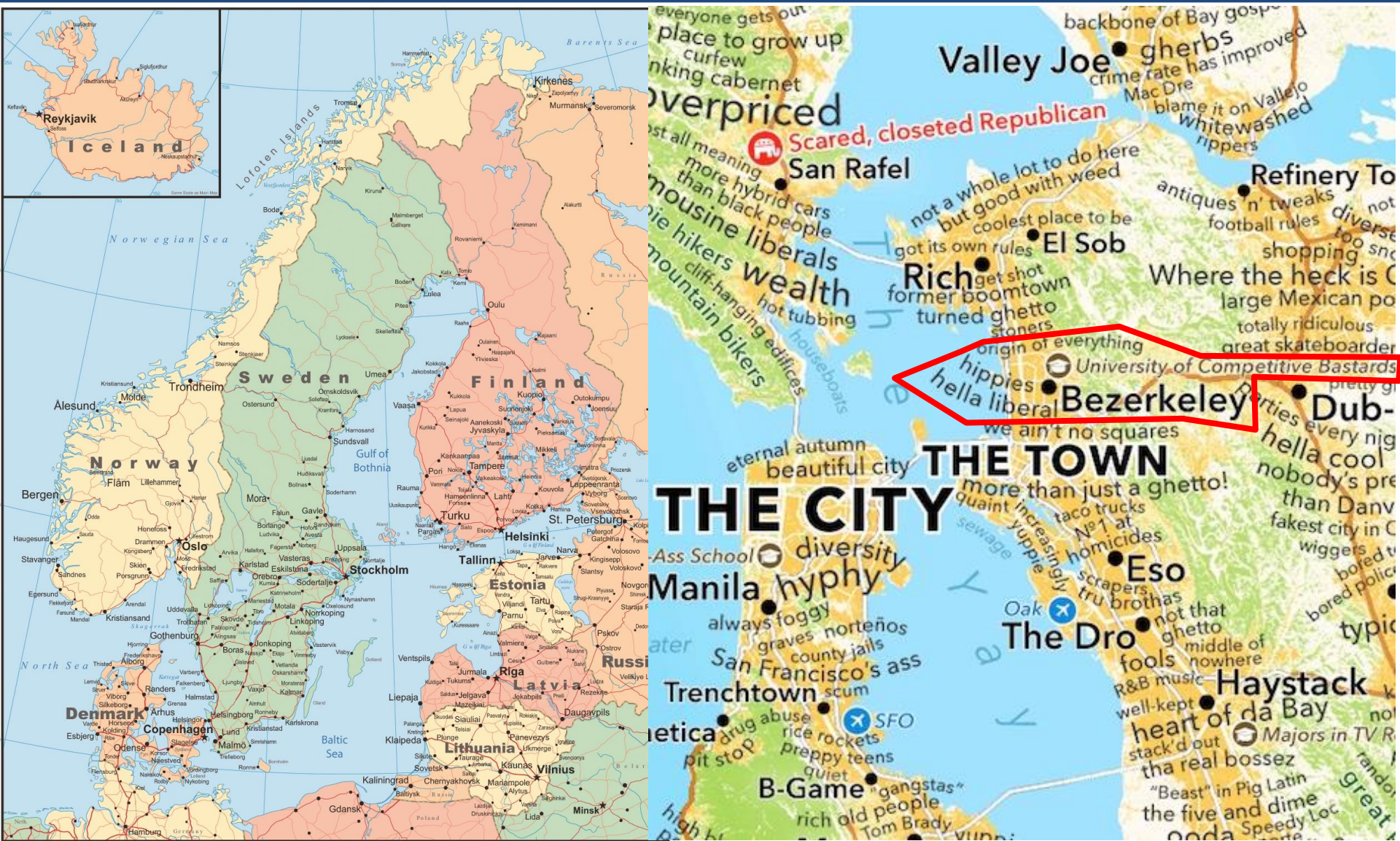
E.O. Lawrence (Norway)
Nobel Prize (1939)



Glenn Seaborg (Sweden)
Nobel Prize (1951)



Our political philosophy is similar as well



And we have trolls too!!!



...ours are scarier...

Speaking of scary... the only polar bear we saw was waiting for his luggage at LYR



But the students kept tempting fate...



Overall, I think we can all agree that this meeting set a new high water mark on the *Langøysund*



In closing

To Sunniva, Magdalena (who missed all the fun ☹), Andreas, Vetli...
and to all of the speakers, poster presenters and attendees who made this meeting exciting and fun!

Tusen Takk!!!

Safe travels!