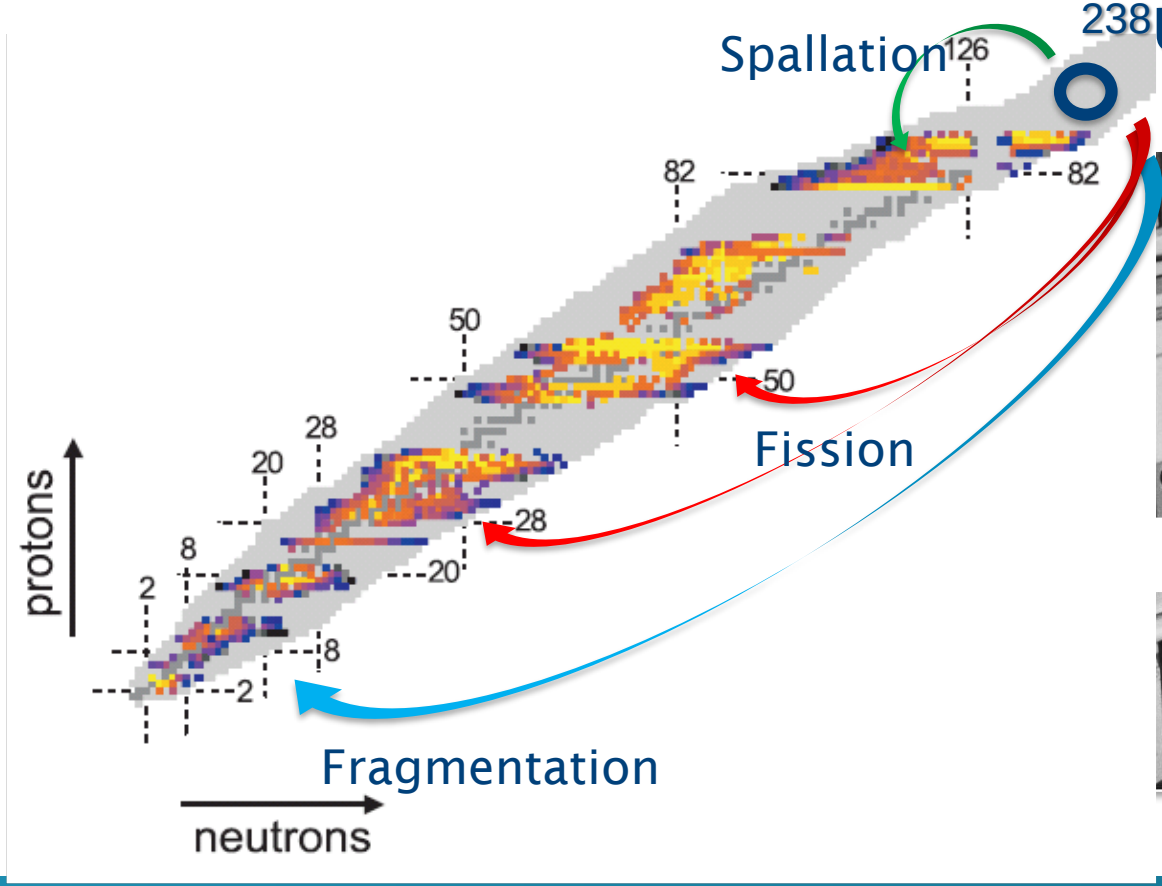
Laudatio for Björn Jonson

- ISOLDE group leader: 1977 – 1984
- Major extension of the ISOLDE's RIB beams (→ Helge Ravn's group)
- Initiated a broad scientific program studying and using the decay characteristics



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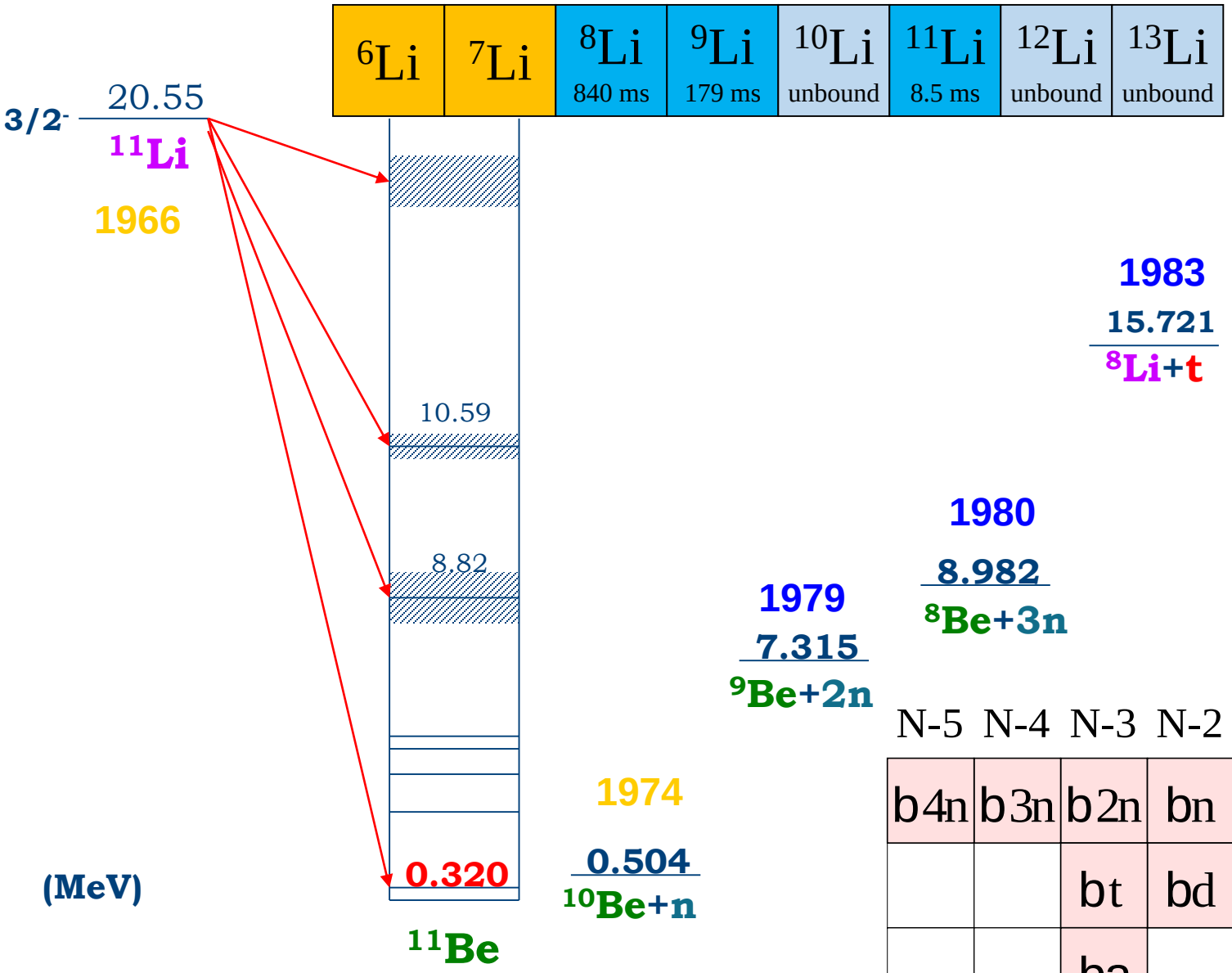
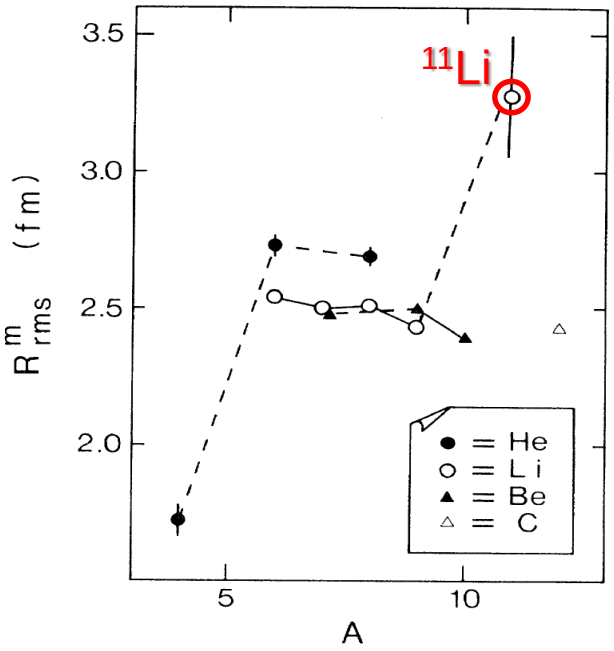

6Li
7Li
8Li
840 ms
9Li
179 ms
10Li
unbound
11Li
8.5 ms
12Li
unbound
13Li
unbound
3/2-
20.55
11Li
1966
10.59
8.82
0.320
(MeV)
11Be
1974
0.504
10Be+n
1979
7.315
9Be+2n
1980
8.982
8Be+3n
1983
15.721
8Li+t
1996
17.916
N-5
N-4
N-3
N-2
N-1
N
b4n
b3n
b2n
bn
b
bt
bd
bp
ba
Z+1
Z
Z-1

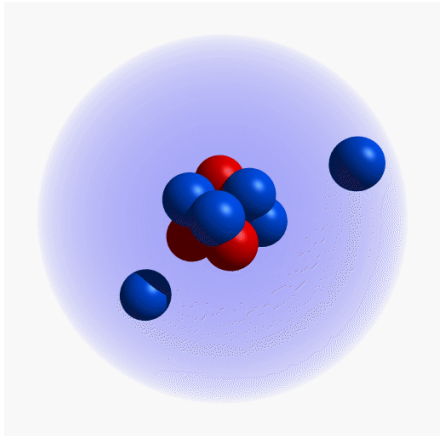
Halo nuclei

Tanihata PRL **55,** 2676 (1985)



The Neutron Halo of Extremely Neutron-Rich Nuclei.

P. G. HANSEN (*) (§) and B. JONSON (**)



Europhys. Lett. **4**, 409 (1987) – ~ 1000 time cited

A direct study of pairing energies as the neutron drip line is approached is clearly very interesting; one may expect that the new and very accurate techniques for measuring nuclear masses [21] that are now close to operational will be essential for throwing light on these problems.

ISOLTRAP

NUCLEAR HALOS

P. G. Hansen[1] *and A. S. Jensen*

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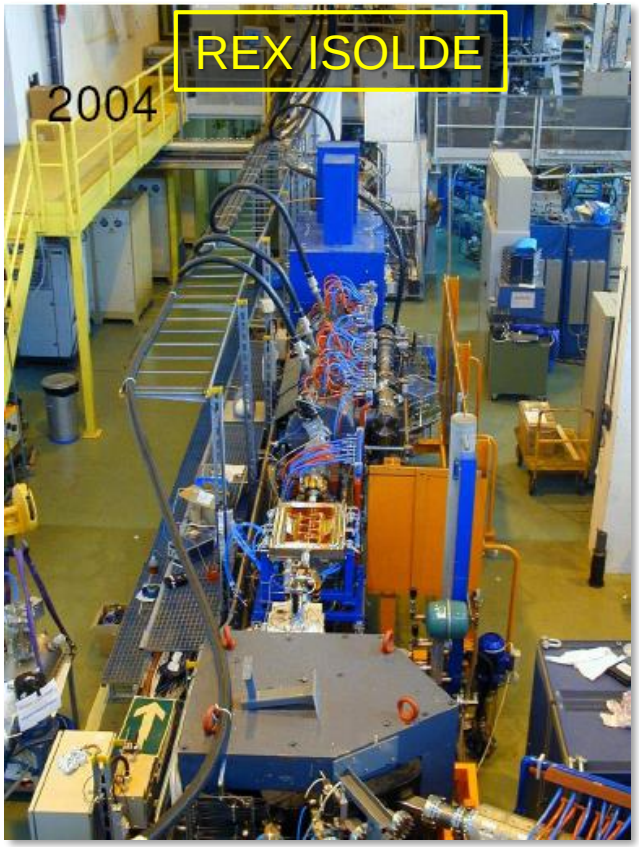
B. Jonson

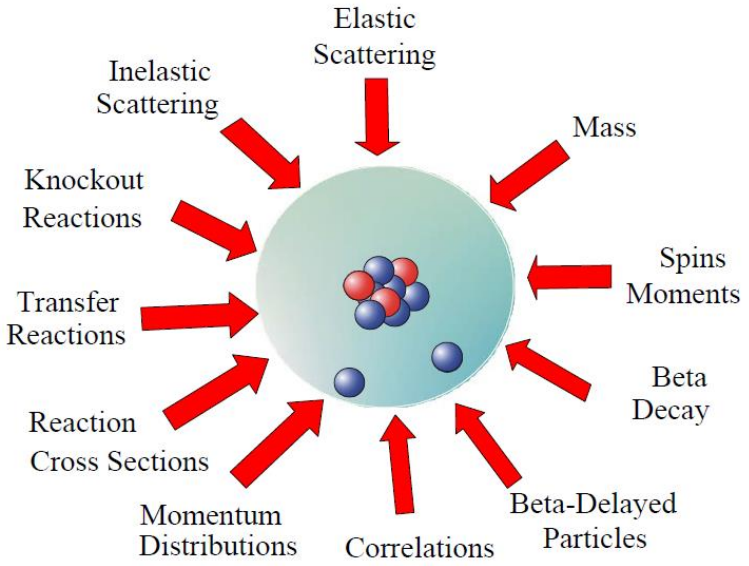
Department of Physics, Chalmers University of Technology, S-412 96 Göteborg, Sweden

Annu. Rev. Nucl. Part. Sci. 1995. 45:591–634



Light dripline nuclei

B. Jonson / Physics Reports 389 (2004) 1–59



Investigation of the $^{9}Li+^{2}H \rightarrow {}^{8}Li + t$ reaction at REX-ISOLDE
Jeppesen et al., Phys. Lett. B635 (2006) 17

KU LEUVEN

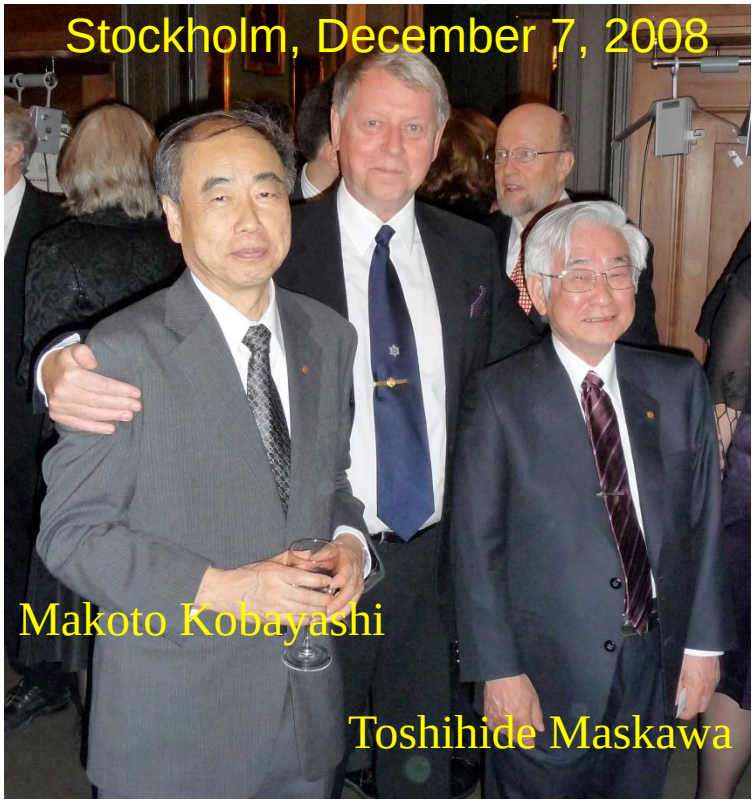
Unitarity of the Cabbibo Kobayashi Maskawa matrix

- Discovery of ^{32}Ar and ^{74}Rb
- Study of super allowed Fermi decay:
  - Detailed and precise beta decay study
  - Precise mass measurements (Blaum et al., Phys. Rev. Lett. 92 (2003) 260801)

^{32}Ar
98 ms

Hagberg et al., PRL39 792 (1977)

Nobel Prize in Physics - 2008
"for the discovery of the origin of the broken symmetry which predicts the existence of at least three families of quarks in nature."



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ISOLDE moves to the PS Booster

CERN INAUGURATES ITS LATEST EXPERIMENTAL FACILITY.

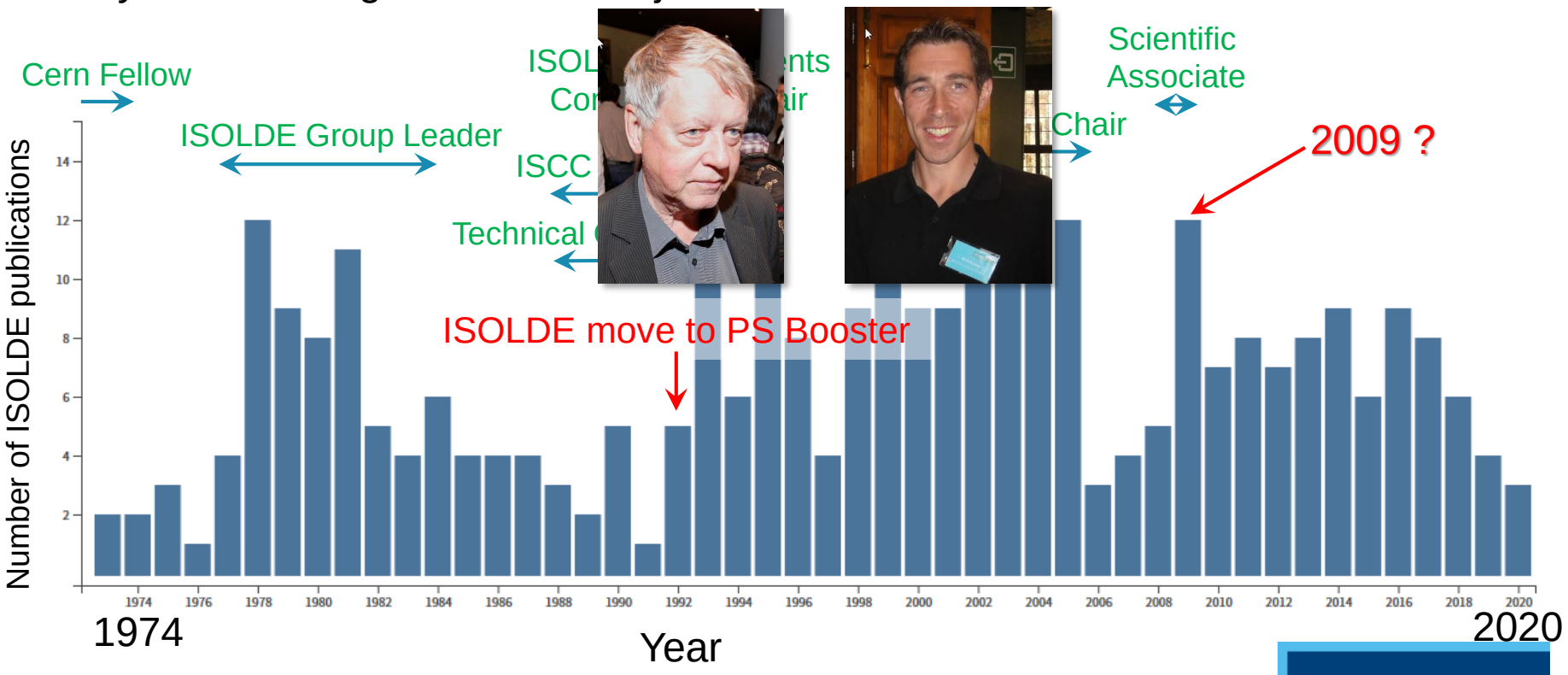
Leading physicists from all over Europe came to CERN on 26 May to celebrate the inauguration of CERN's latest experimental facility, ISOLDE (Isotope Separator On-Line) at the Proton Synchrotron Booster. A ceremony was held in the new ISOLDE experimental hall where the participants were welcomed by Prof. C. Rubbia, Director General of CERN. Prof. B. Jonson, of Chalmers University in Göteborg, explained the physics potential of the new installation and Prof. C. Detraz, Director of the Institut National de Physique Nucléaire et Physique des Particules (IN2P3), stressed the importance of the ISOLDE facility for European Nuclear Physics.

Conclusion / personal remarks:

- Björn had a tremendous influence on the ISOLDE program
  "Björn has always been around at ISOLDE"

- Together with the late P. Gregers Hansen, Björn had a major impact on nuclear-structure physics related to 'Halo Nuclei'

- My sincere congratulations to Björn and Klaus!

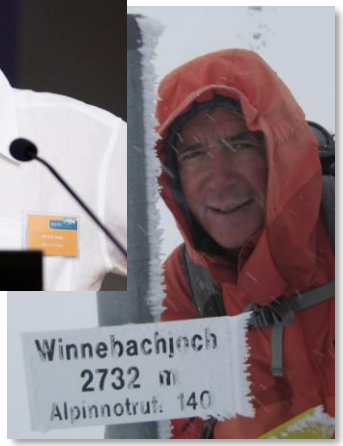


KU LEUVEN

Thanks!


Jürgen Kluge


Mark Huyse




IKS Staff


Nuclear Spectroscopy Group

KU LEUVEN