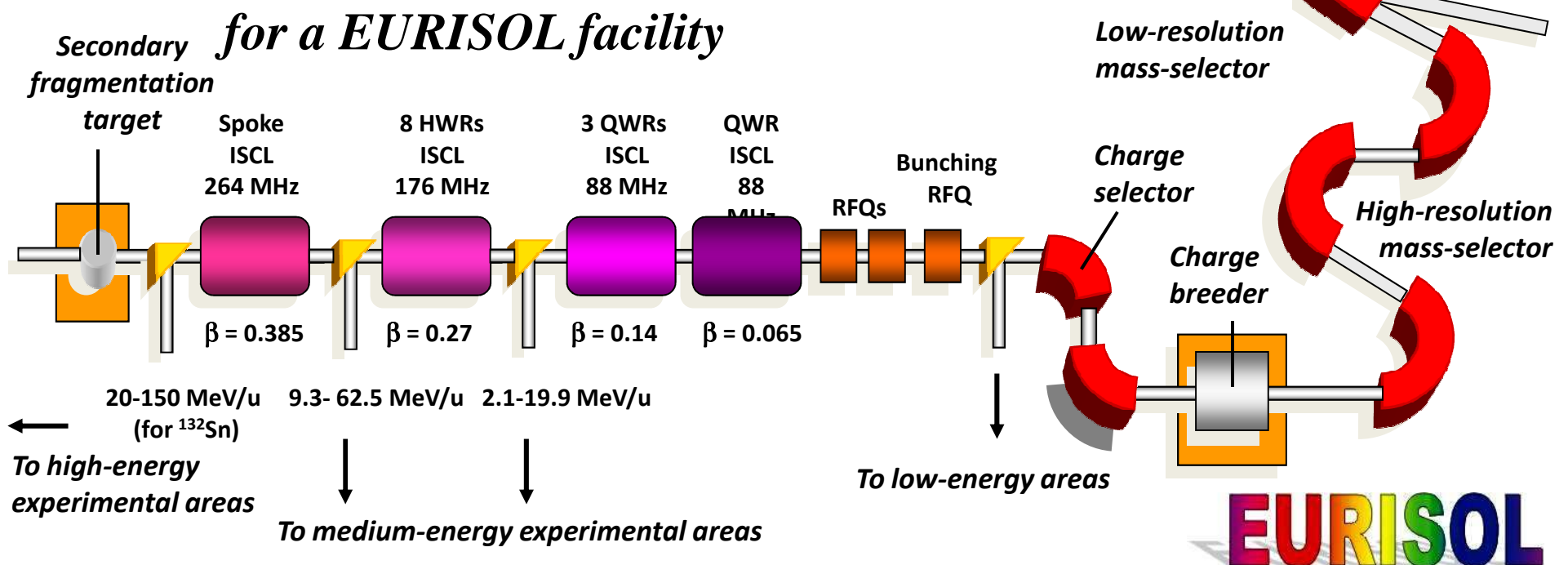
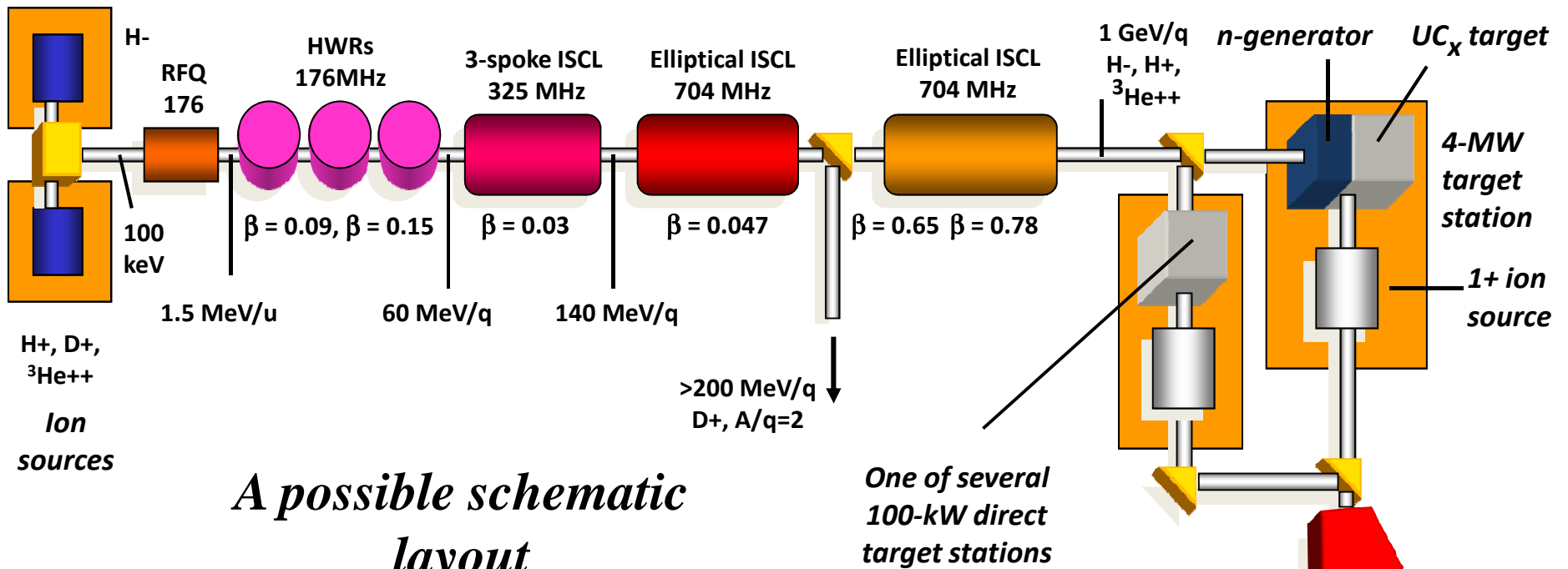


# EURISOL: Current Situation and Initiatives

Yorick.Blumenfeld@cern.ch

**EURISOL**  
*Design Study*



**EURISOL**

# What is EURISOL?

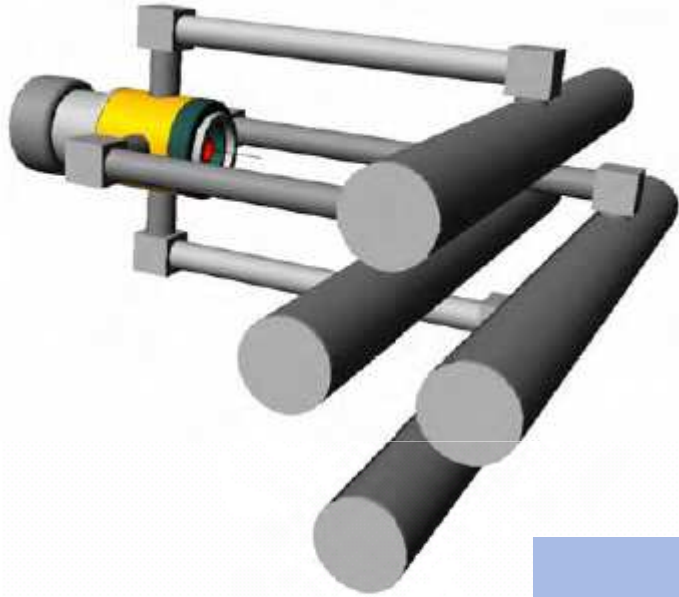


# Neutron-Deficient Nuclei at EURISOL

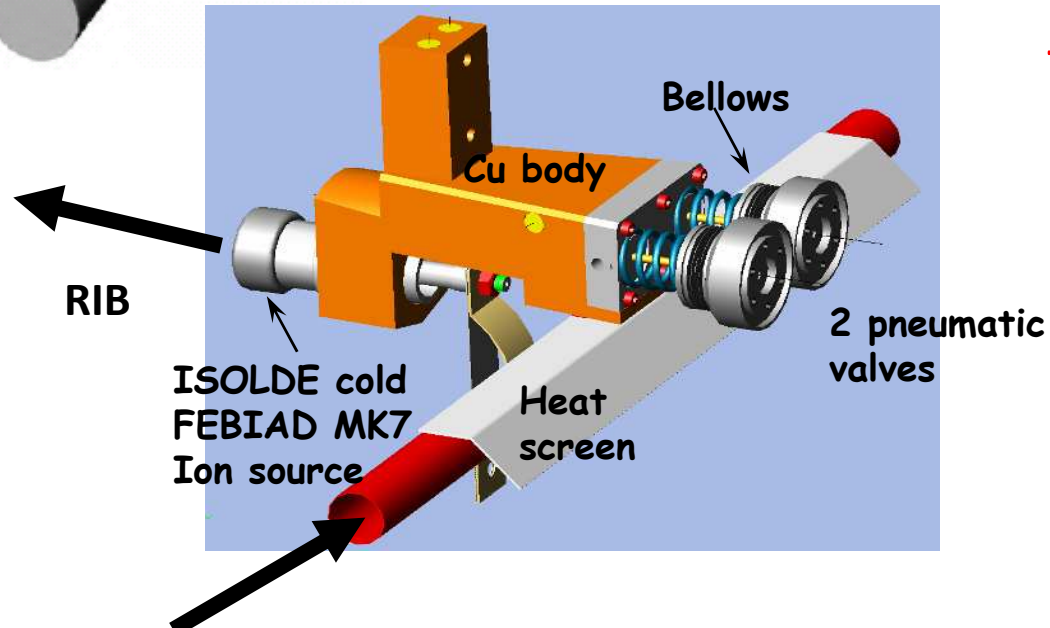
- Neutron-rich nuclei will be produced through n-induced fission
- Neutron-deficient nuclei will be produced through spallation (or other specific) reactions on solid targets.
- In a first approach a increase in intensity of a factor 50 can be expected with respect to ISOLDE today
- Post-accelerated energies in excess of 200A MeV can be expected



# 100 KW Solid Target



Conceptual Design



Tests at ISOLDE

2x water cooled  
transfer lines  
2x 20cm containers

# Post Accelerated Energy

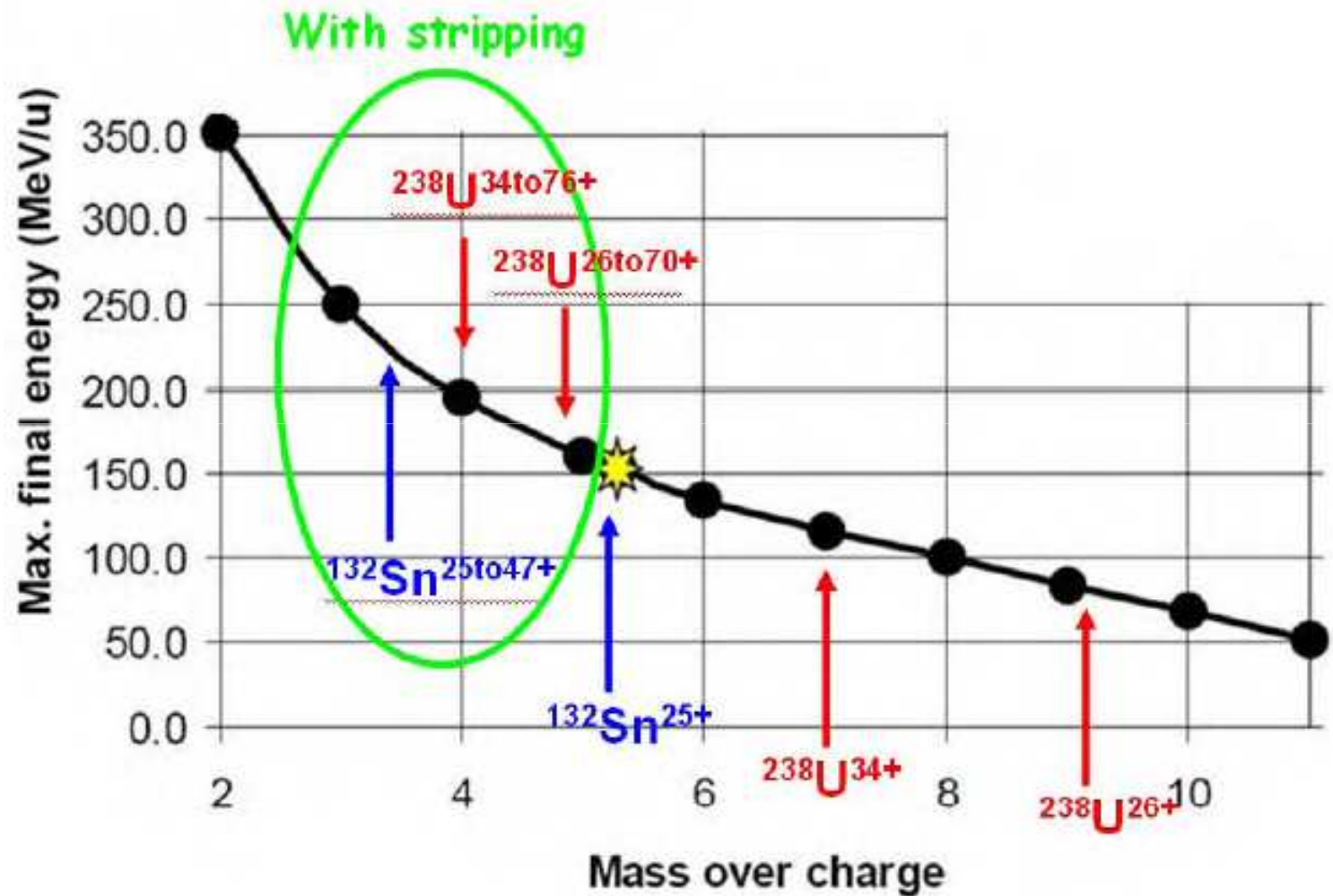
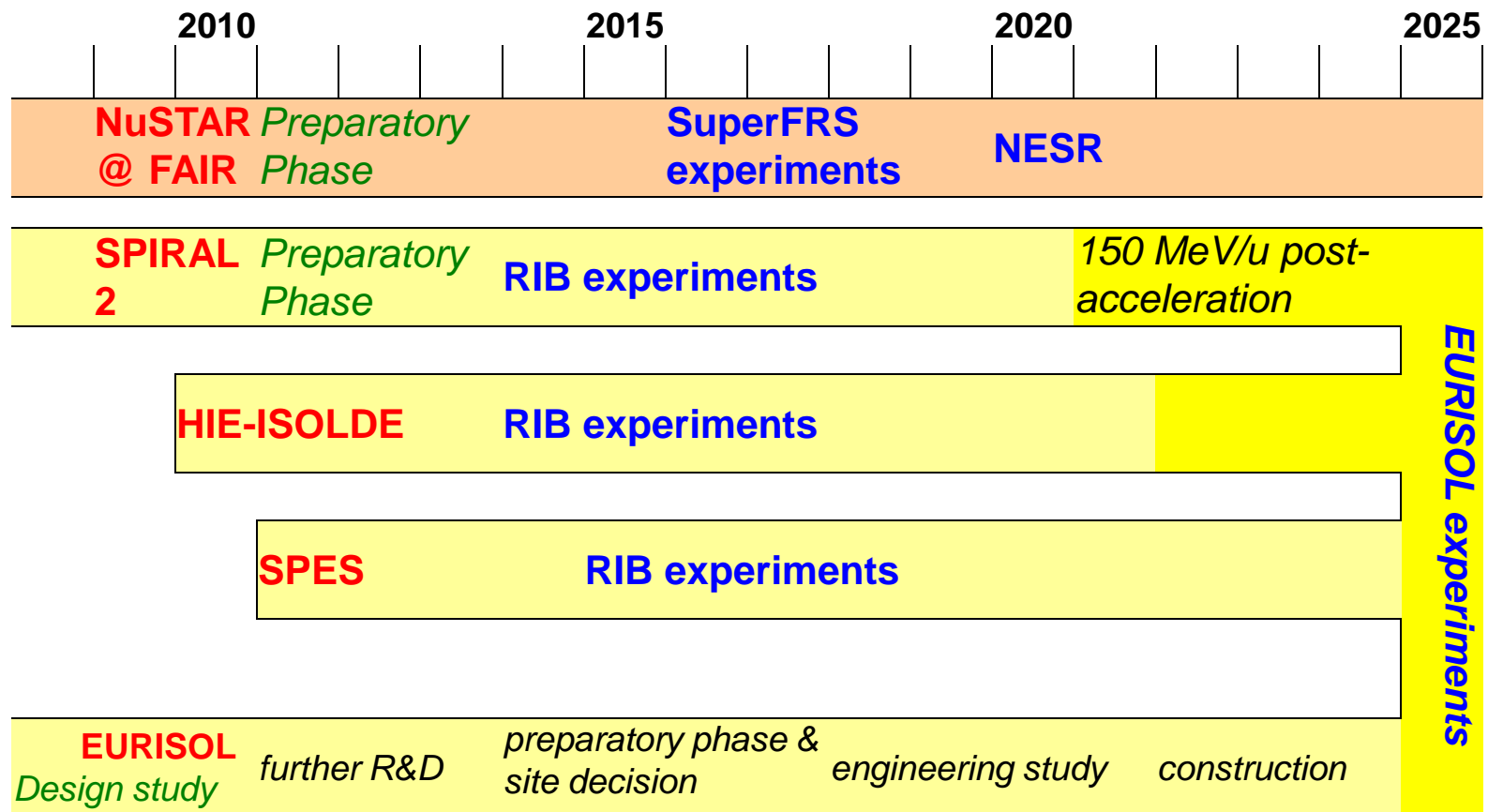


Fig. 10: Final energy versus  $A/q$  ratio.

# NuPECC Long Range Plan 2010 Timeline

## RIB Facilities

HIE-ISOLDE will play an important role in the network of ISOL facilities preparing EURISOL (with SPIRAL2 and SPES)



# Timescale for EURISOL

- 2009: Completion of Design Study
- 2010-2013 : Transition period; contacts with funding agencies and political bodies
- 2013 : Application to be included in ESFRI list (support from NuPECC & LRP necessary)
- 2013 : Call for preparatory phase
- 2014-2017 : EURISOL Preparatory Phase
- 2017-2019 : Preparation of TDR
- 2020-2025 : Construction
- 2025 : First Beam



# The “Transition” Period (2010-2013)

- The EURISOL project office: Y.B., Peter Butler, Alberto Facco, Marek Lewitowicz, Piet van Duppen
- The EURISOL collaboration: (MOU between all laboratories interested in furthering EURISOL; in preparation)
- The EURISOL User Group (Established with elected executive committee; will federate scientific community and update physics case; A. Bonaccorso, chair ): Second workshop in Valencia 21-23 Feb.
- The EURISOL Network in ENSAR (included in ENSAR application; will coordinate EURISOL focused R&D at current facilities and fund workshops and Town Meetings; 105 KE; leader Y. Blumenfeld)
- The EURISOL work package in TIARA : (included in TIARA application; Define and Prepare R&D platforms for EURISOL; 270 KE; leader S. Bousson – Orsay)
- Requests to NuPNET for pan-European funded R&D through national funding agencies: call open on Feb. 1; deadline April 15. Meeting at CERN on March 1.

# EURISOL-NET: The EURISOL Network in ENSAR

- 5 participants: CERN/ISOLDE, GANIL, IN2P3 (IPNO-Orsay), INFN (LNS-Catania and Pisa), JYFL
- Total EC budget: 105 KEuros
- Two Tasks:
  - Task 1: Coordination and dissemination of R&D for ISOL facilities (Yacine Kadi)
  - Task 2: Physics and Instrumentation for ISOL Facilities (Angela Bonaccorso)
- Supports the UG Physics workshops
- Will organize 2 town meetings (2012 and 2014).