

TRIUMF's ISAC Vicennial Anniversary



Session 1

Gordon Ball - Excellent overview of the early development of ISAC

Pierre Briccault - Told us about all the challenges of development of the targets –
especially to convince the safety authorities that the isotopes had to escape
– i.e. an open source

Bob Laxdal The development of new accelerator technologies. RFQ, DTL, SCL

Jens Lassen Early use lasers to greatly improve the selectivity of the ions

- Volume of new developments needed
- No text book reference
- Short time scale
- Fortunate that there was a legacy from KAON

*Young generation should be inspired by this tremendous effort by all the people involved.

*We have a responsibility to exploit the legacy of all the engineers, scientists and technicians involved.



Eric Vogt

One of the pioneers
to build the Cyclotron

First proton beam
1968



John D'Auria

In 1985 proposed to
use the proton beam
as the driver for an
ISAC facility

1987 TISOL



Alan Astbury

Secured funding
In 1995 to fund ISAC

1999 first ISAC beam

Challenges for ISAC science:

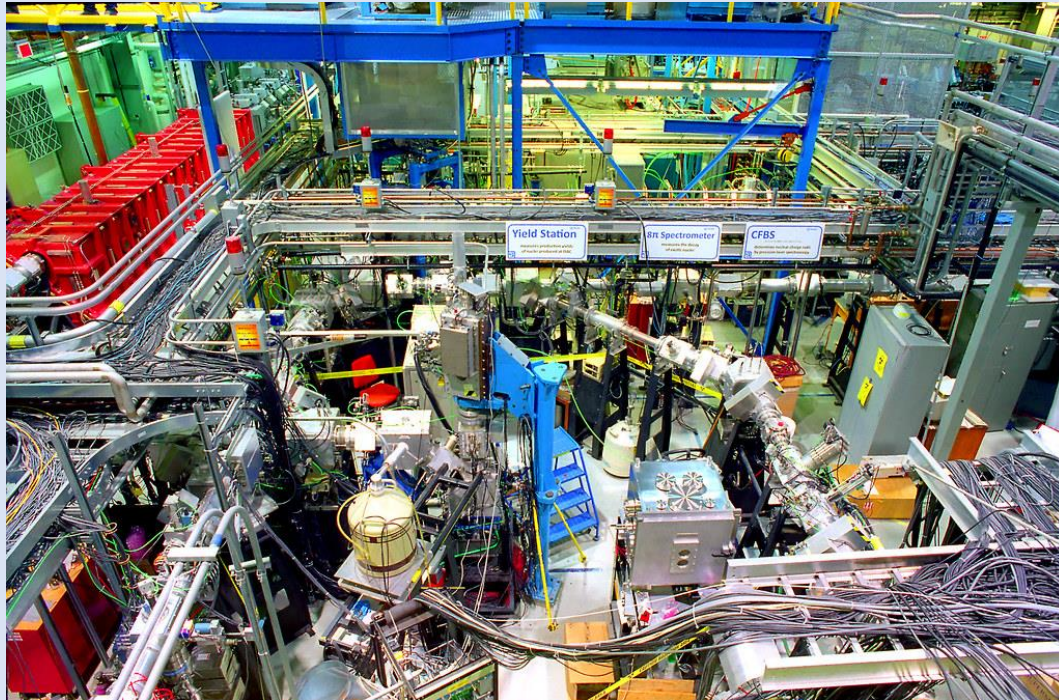
Production of accelerated RIB's

→ Low beam intensity

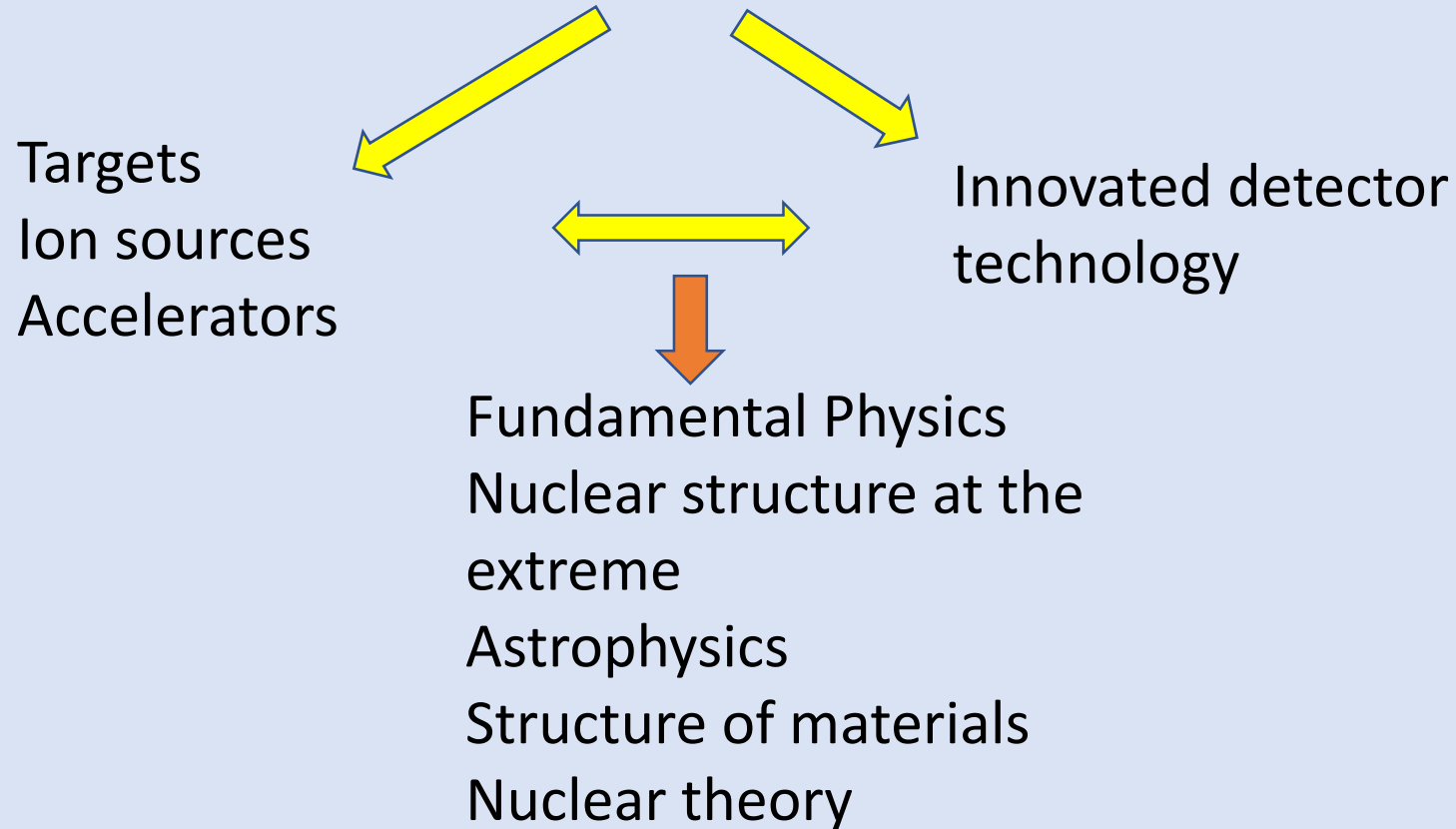
Development of Highly fragmented $\sim 4\pi$ detectors

Louvain-la-Neuve in mid 1990's first faced these challenges

~ 25 years latter:-



This symposium highlights the achievements at TRIUMF from the interaction between these two activity areas:



*RIB production is a complex chain of operations, 7 major, from p-source to ISACII accelerator

*Major Challenge – all stages need continuous maintenance – manpower issues

*Reliability index -> is important to attract the best international scientists.

The future



LINDAU
NOBEL LAUREATE
MEETINGS

Every year ~ 600 young scientists
meet 30 -40 Nobel Laureates
2019 -Physics

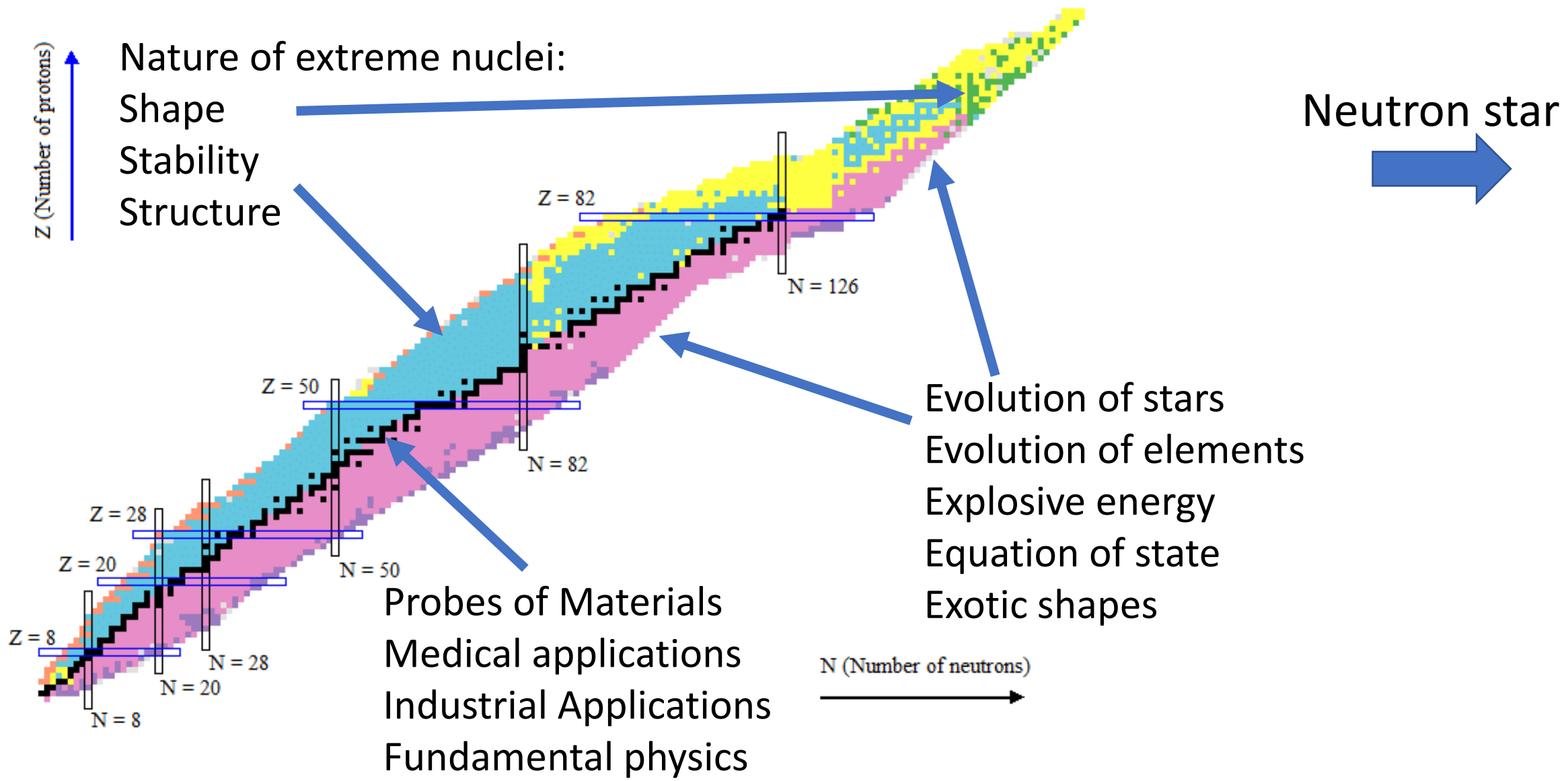
Martinus J. G. Veltman

The Future of Particle Physics

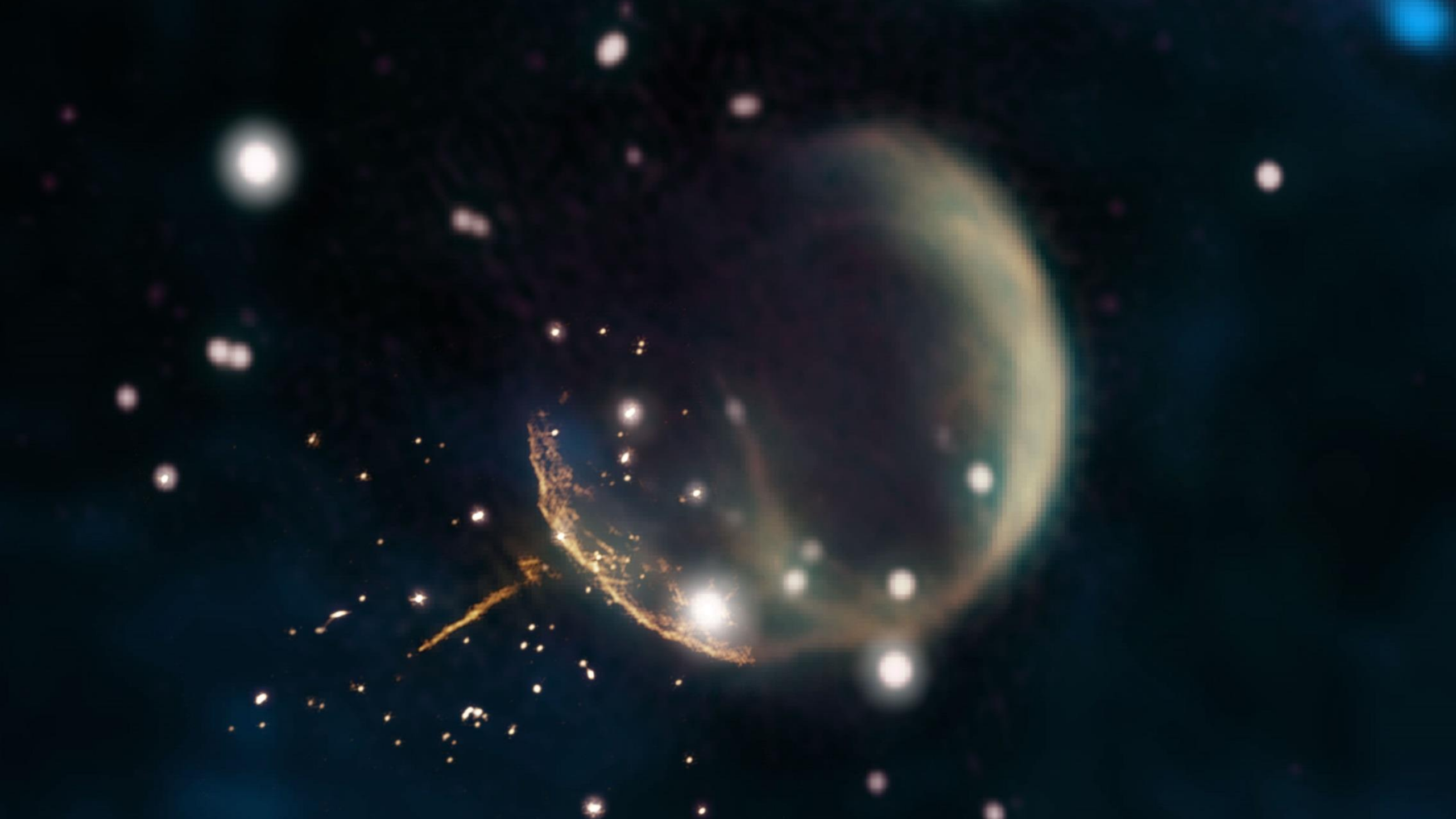
A person asked : ‘What is your opinion on the future of particle physics?’

Prof’ Veltman answered : ‘There really isn’t any – we don’t really know what to do’.

The Future for ISOL science is clear  New applications for RIB's
Explore unknown territories







This symposium has shown how much the ISAC field has moved on in 20 years, and that it has a bright future ahead.

Thanks to all the speakers, and organisers.