

Neutrino Physics: Theory and Experiments

Lecture 5: Solar neutrinos

Christian Buck, May 14th, 2025

Homestake experiment (1st SNP)

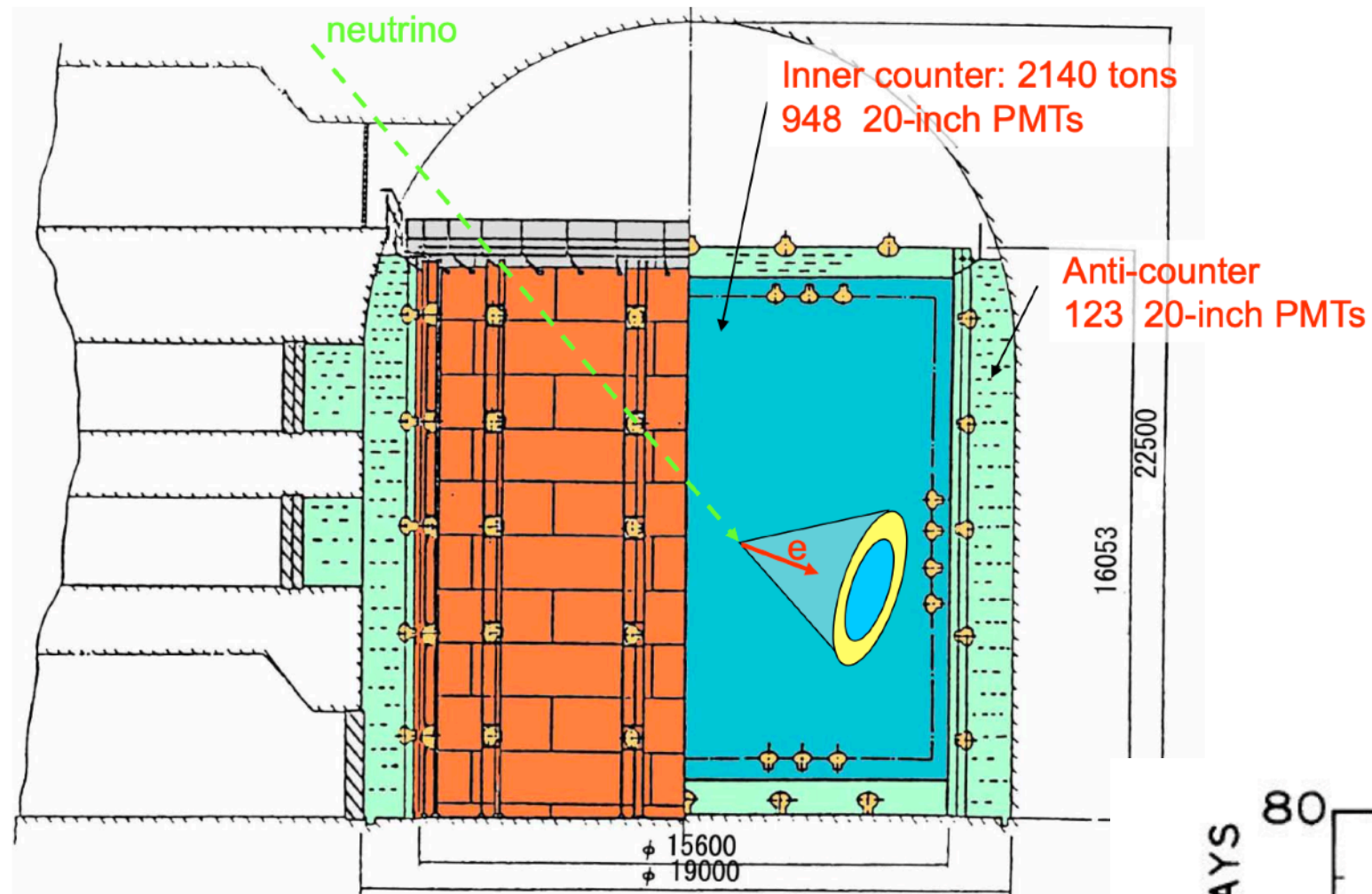
R.Davis: “We are ready now, please turn on the Sun”



ENERGY.GOV - HD.6D.653, <https://commons.wikimedia.org/>

<https://cerncourier.com/a/memories-of-a-nobel-laureate/>

Kamiokande detector (2nd SNP)



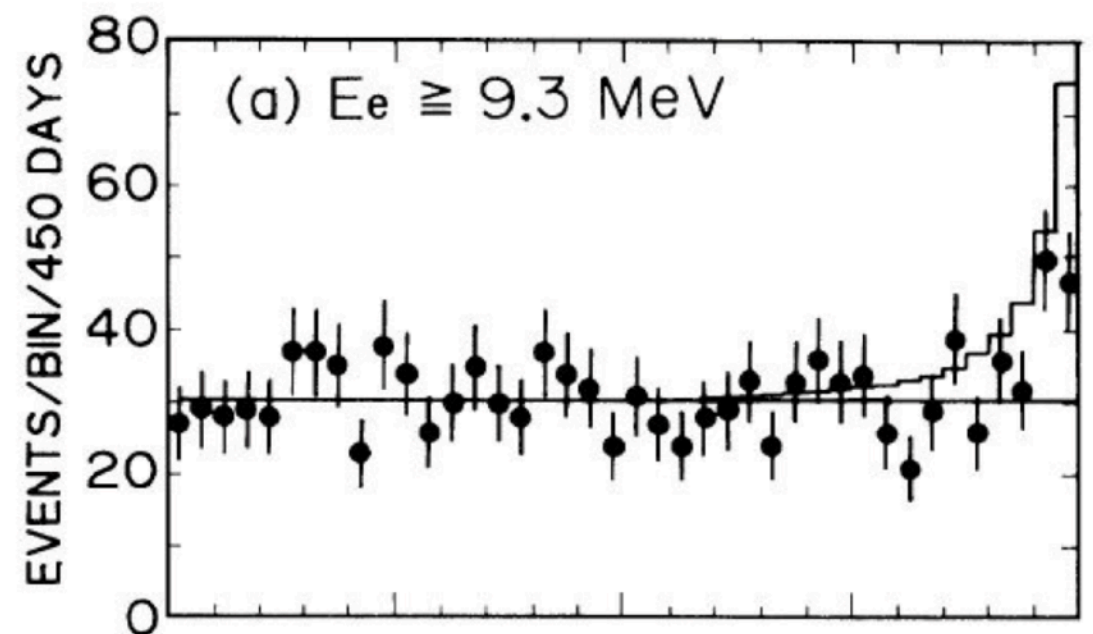
- Directionality
- Real-time
- Energy spectrum



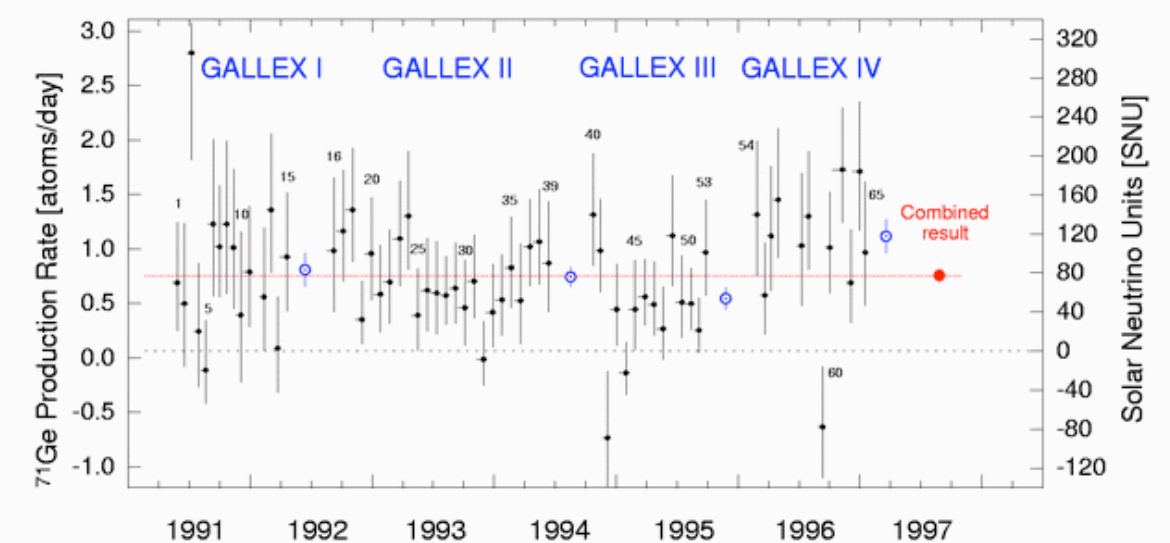
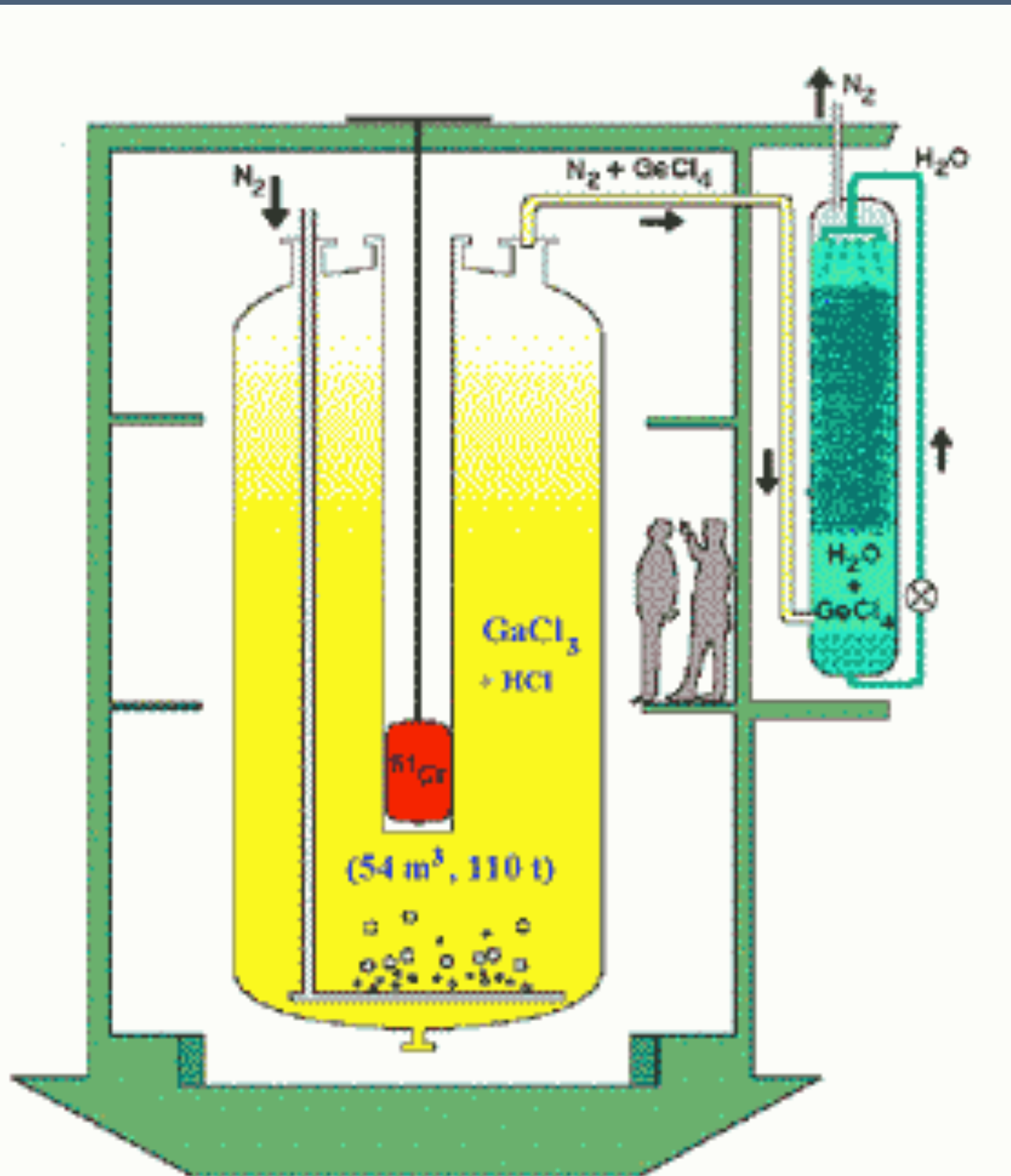
Energy threshold



<https://arxiv.org/pdf/2202.12421>



GALLEX/GNO (3rd SNP)



Summary results after SNO

