

# THE DARK SIDE OF THE OSLO METHOD

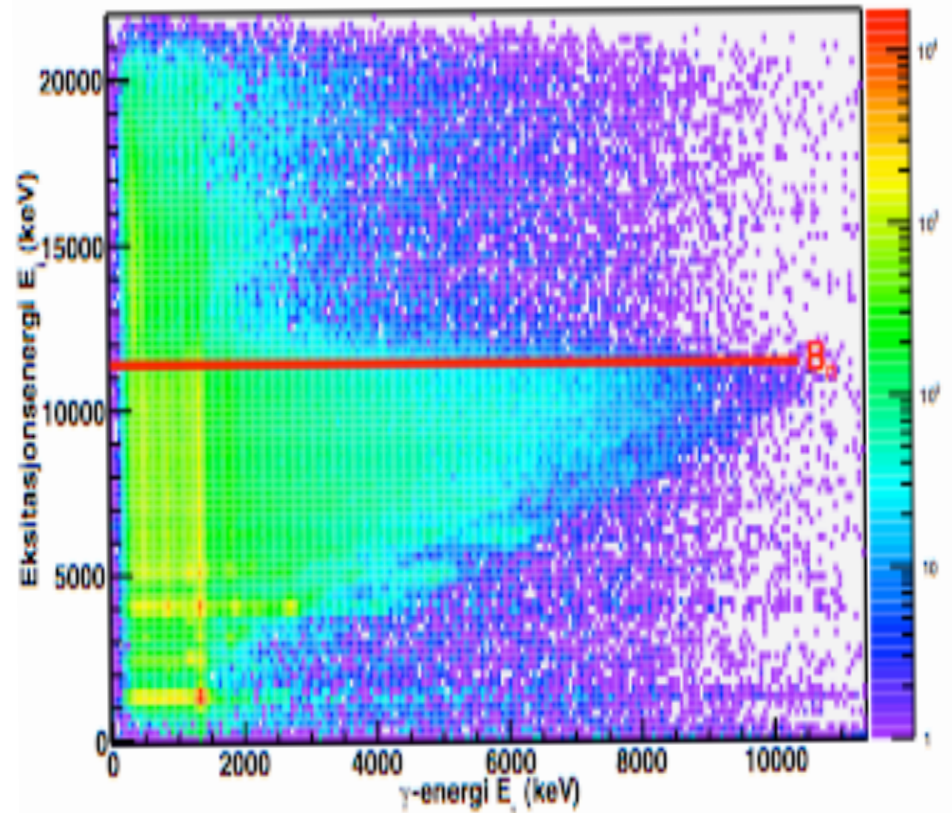
- A MASTERSTUDENTS TALE



THERESE  
RENSTRØM,  
MASTERSTUDENT  
OCL

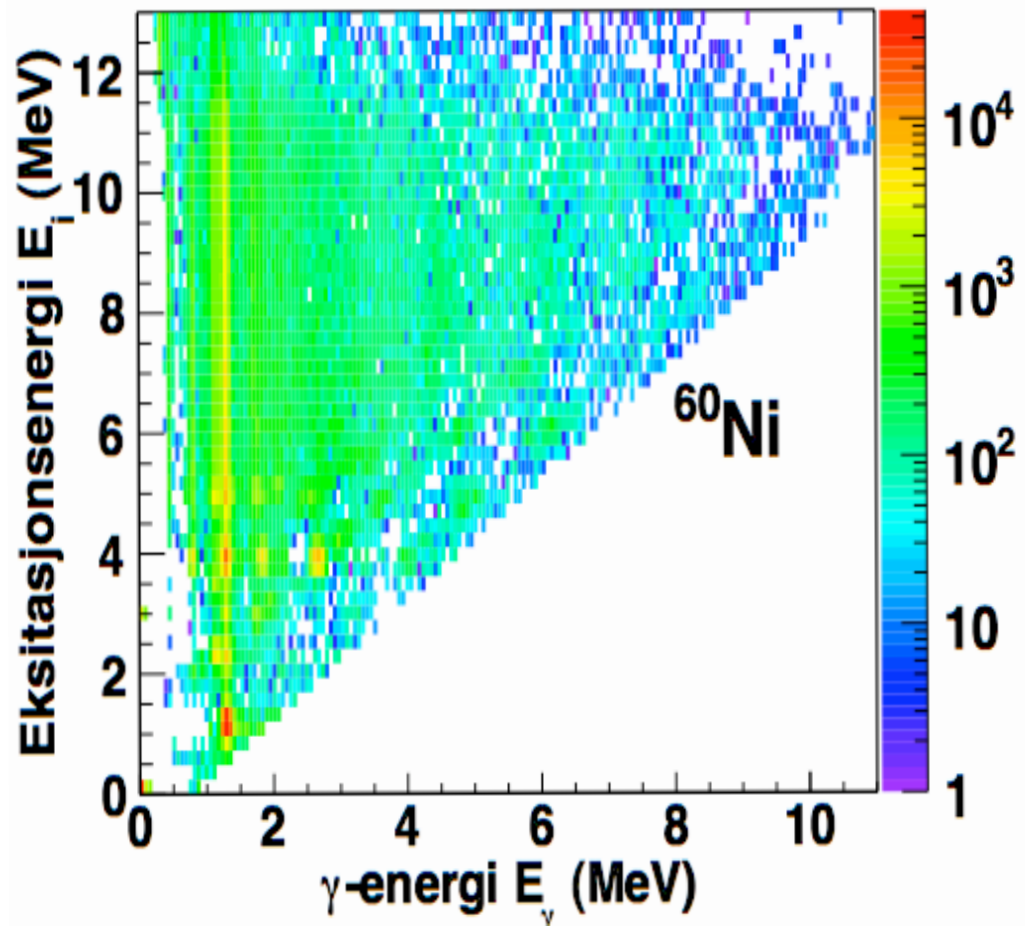
# Matrix no.1- Raw coincidences

- Calibration
- Answering the question: “Who are you, and where do you come from?”
- Using simple kinematics to deduce excitation energy of the nuclei



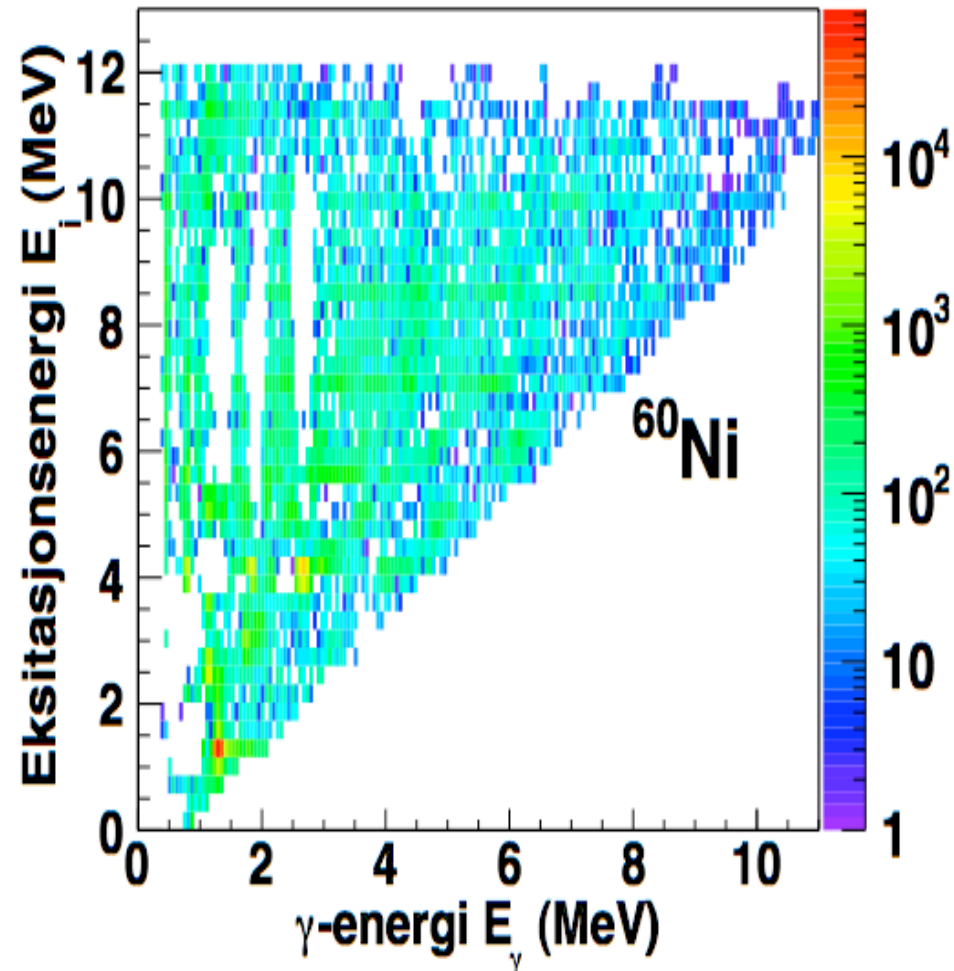
# Matrix no.2 - The unfolded

- Folding with the response matrix of the NaI-detectors gives the unfolded particle- $\gamma$  matrix

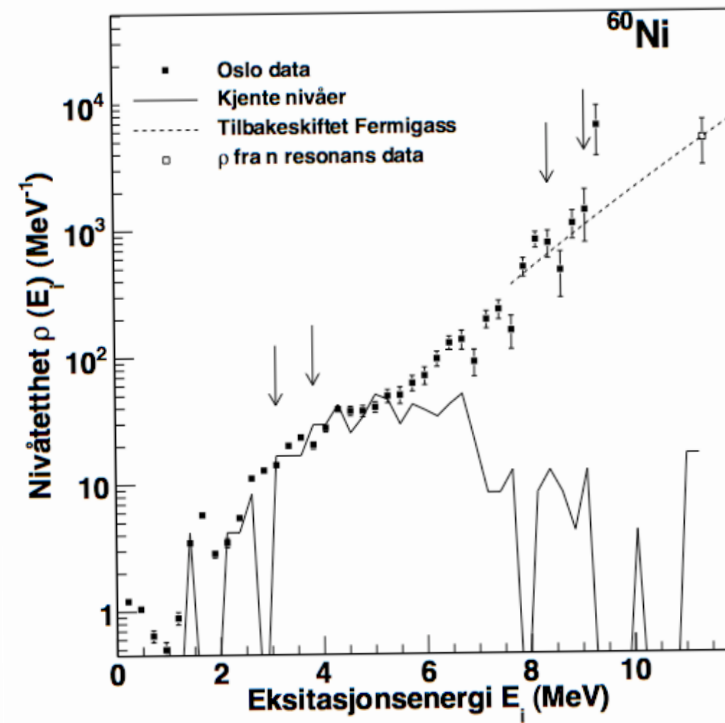
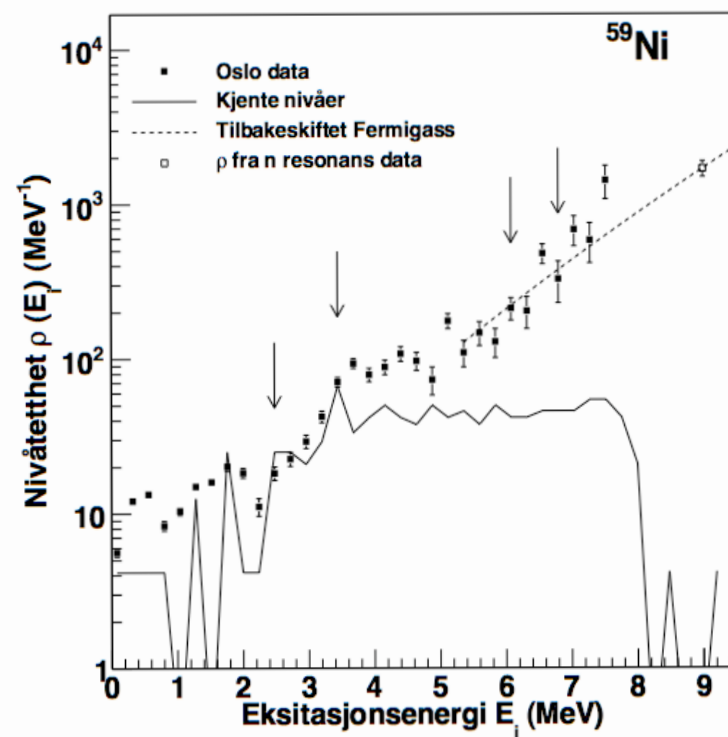


# Matrix no.3 - The 1.generations

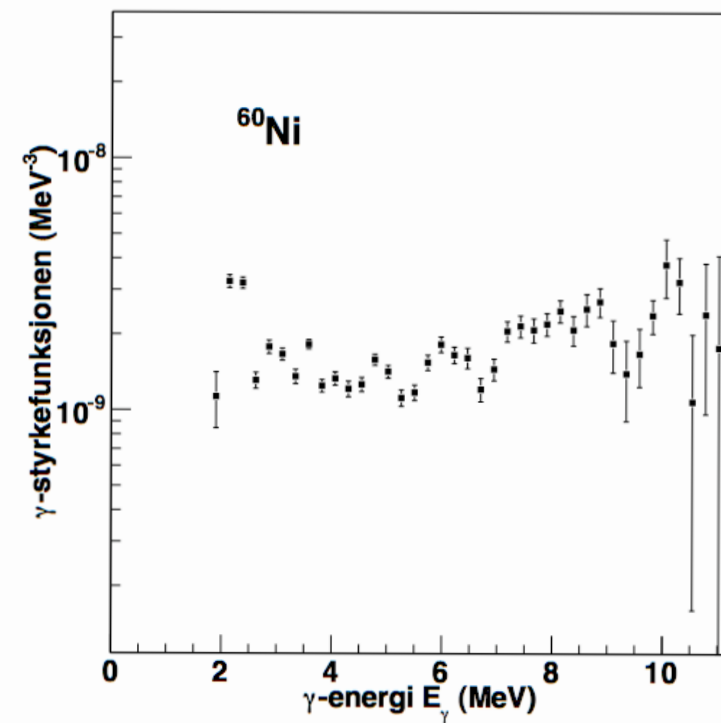
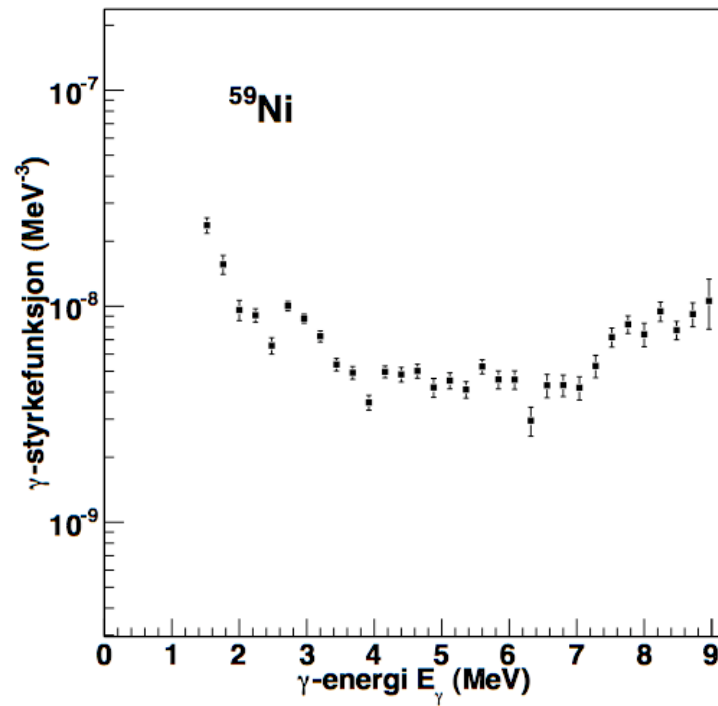
- Extracting the first emitted  $\gamma$  in each cascade gives the 1.generation matrix.



# Level densities



# $\gamma$ -ray strength functions





THE END



IF YOU HAVE ANY QUESTIONS

- DO HESITATE TO ASK 😊