



INSTITUTO GALEGO  
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# Quenching of spectroscopic factors in $^{10,12}\text{Be}(d, ^3\text{He})$ reactions

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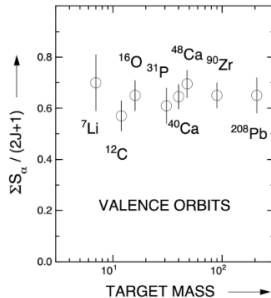
# A recap on spectroscopic factors

**Spectroscopic factors** arise from the breakdown of the single-particle scheme to describe nuclear reactions:

$$\sigma = C^2 S \cdot \sigma_{s.p}$$

- **Long-range** correlations: vibrations, giant resonances,...
- **Short-range**: tensor forces,...

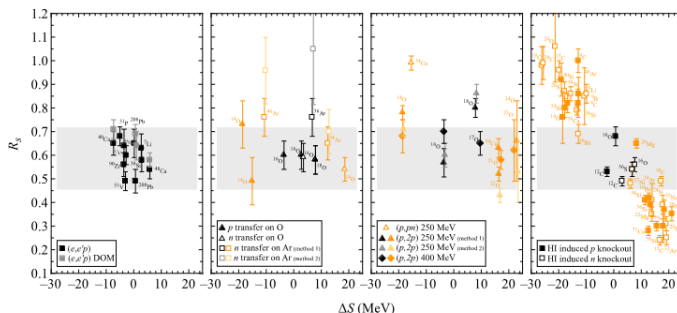
Reduction of  
~65 %!



*T. Aumann et al. Prog. Part. Nucl. Phys. 118 (2021)*

# A long-standing puzzle

A trend with asymmetry  $\Delta S \equiv S_n - S_p$  is found depending on the experimental **probe**!



*T. Aumann et al. Prog. Part. Nucl. Phys. 118 (2021)*

# A longer title

- one
- two