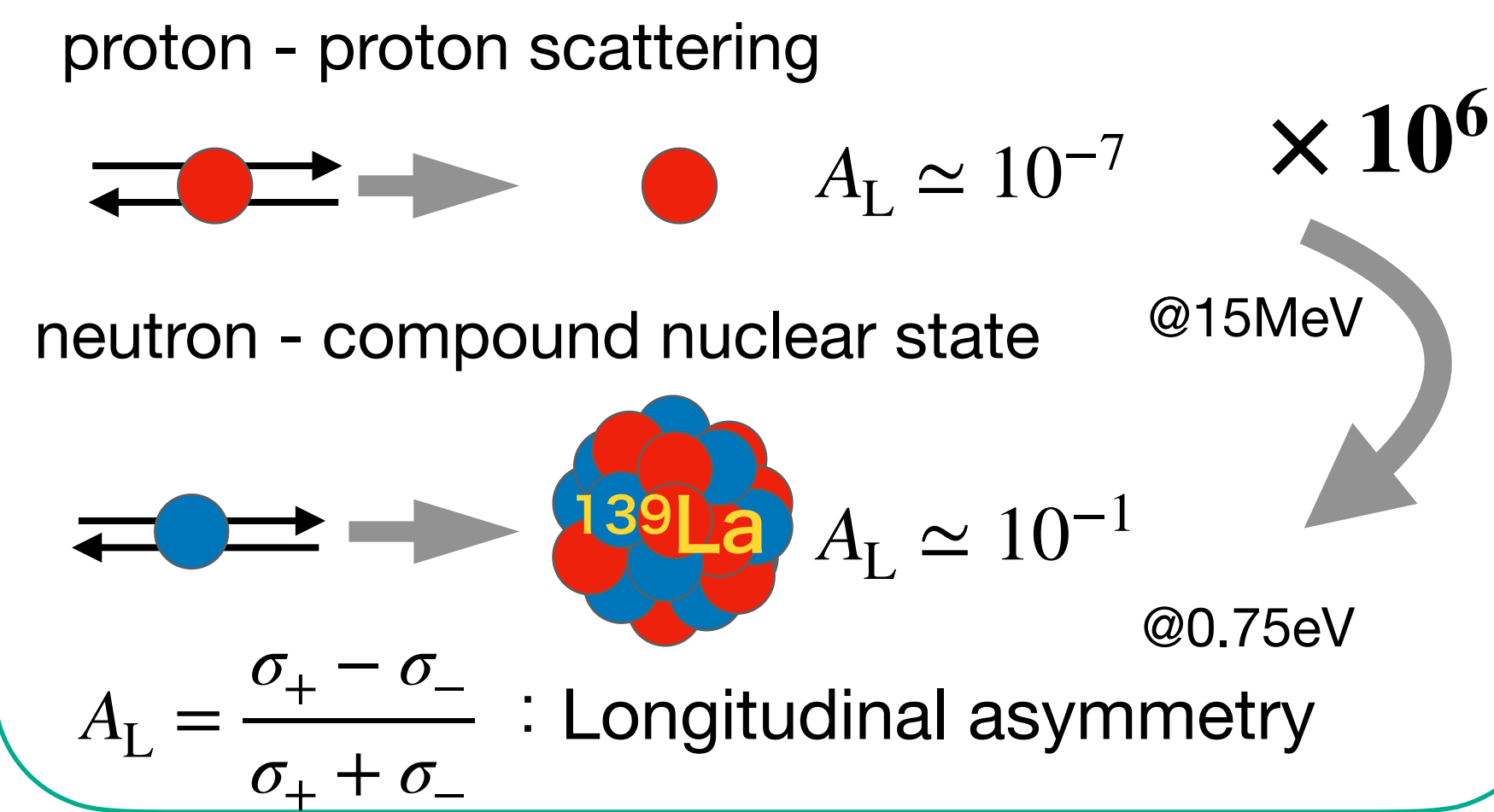


Precise measurement of parity violation in the $^{139}\text{La}(n,\gamma)^{140}\text{La}^*$ reaction

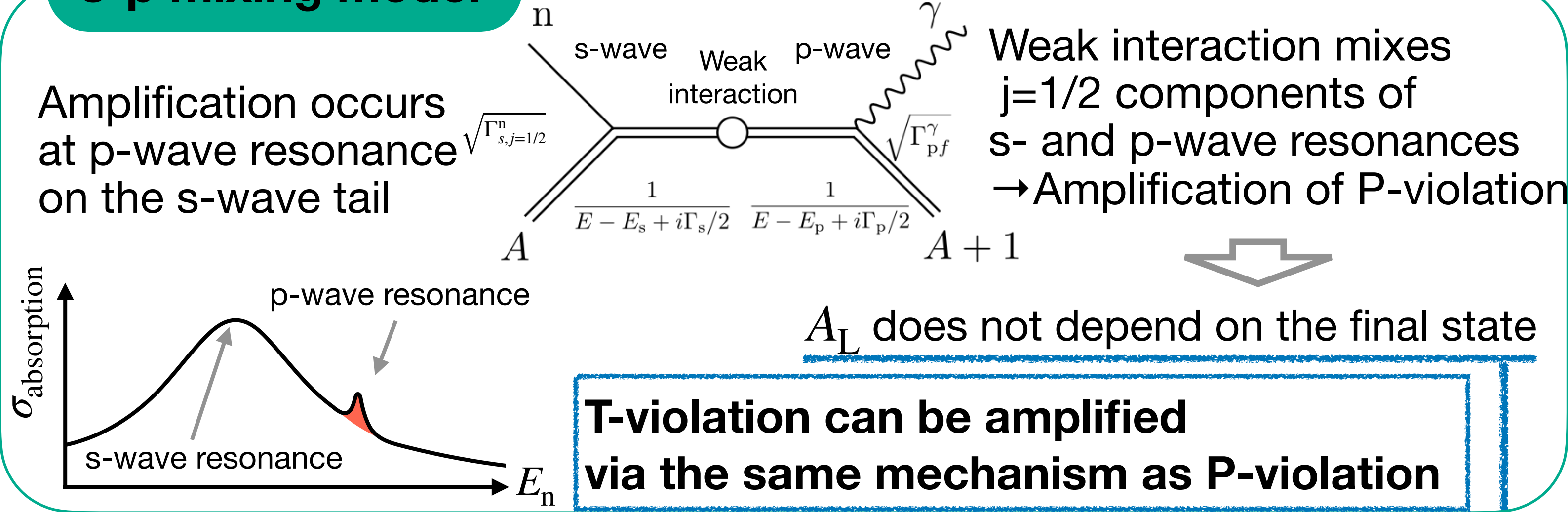
S. Hayashi¹, K. Asai¹, S. Endo², S. Kudo¹, T. Oku^{2,3}, M. Okuizumi¹, T. Okudaira^{1,2}, S. Kawamura¹,
M. Kitaguchi¹, A. Kimura², R. Kobayashi², H. M. Shimizu¹, S. Takada^{4,2}, and NOPTREX collaboration

¹Nagoya Univ., ²JAEA, ³Ibaraki Univ., ⁴Tohoku Univ.

P-violation amplification



s-p mixing model



Final goal : Sensitive search for T-violation in nucleon-nucleon interaction (NOPTREX)

^{139}La (p-wave resonance : 0.75 eV) is the primary candidate nuclei for T-violation search

This work

- Precise determination of A_L in ^{139}La for T-violation search
- Test the s-p mixing model through the final-state dependence of A_L

➡ Report the results of experiments carried out at J-PARC