

## **Beta-decay and electron capture rates of hot nuclei in stellar matter**

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Thermal effects on the electron capture and beta-decays rates are studied for  $^{56}\text{Ni}$  embedded in dense and hot matter of the collapsing core of a massive star. The influence of temperature on the strength distributions of GT transitions is considered in the framework of the Skyrme-TQRPA model. It is shown that thermal effects make possible negative- and low-energy GT transitions which are Pauli blocked at zero temperature. The obtained weak-interaction rates are compared with those from the large-scale shell model calculations.

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