Measurement of the ^{7}Be(p, γ)^{8}B cross section with the recoil separator ERNA

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^{7}Be(p, γ)^{8}B still represents one of the major uncertainties on the predicted high energy component of solar neutrino flux and it has also a direct impact on the ^{7}Li abundance after the Big Bang Nucleosynthesis. So far, experiments producing data with useful precision were performed in direct kinematics, using an intense proton beam on a radioactive ^{7}Be target. The complicated target stoichiometry and the deterioration under beam bombardment might possibly be the origin of the discrepancies observed between the results of different measurements. Inverse kinematics, i.e. a ^{7}Be ion beam and a hydrogen target, can shed light on systematic effects. We report here on an experiment exploiting a high intensity ^{7}Be beam in combination with a windowless gas target and the recoil mass separator ERNA (European Recoil mass separator for Nuclear Astrophysics) at CIRCE (Center for Isotopic Research on Cultural and Environmental heritage), Caserta, Italy. Measurements in the energy range E_{cm}=350 to 850 keV are presented and their impact on the determination of the stellar rate of ^{7}Be(p, γ)^{8}B is discussed.