

Abstract Submitted  
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**Influence of the Ground State Spin of the Projectile -target on the Fission Anisotropies**<sup>1</sup> AZIZ BHKAMI, Physics Department, Mahabad Islamic Azad University — Fission fragment angular distributions have been investigated for various systems produced in heavy ion reactions at near and sub-barrier energies. In particular, special attention has been paid to the entrance channel dependence of fragment angular distributions. The results of our analysis of the fragment angular anisotropies induced by Boron, Carbon, and Oxygen ions on Thorium and Neptunium targets as well as Fluorine ions on Neptunium target indicate that at bombarding energies around fusion barrier the Transition State Model (TSM) is quite successful in accounting for the observed angular distributions. We have further found that the fission anisotropies strongly depend on the channel spin in consistence with the prediction of the pre-equilibrium model.

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