

NUMERICAL EVALUATION OF THE INFLUENCE OF NON-STATIONARY STATE AND HETEROGENEITY OF THE ROTATED ION BEAM ON THE IRRADIATED CYLINDRICAL TARGET COMPRESSION PARAMETERS

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Higher compression ratios in targets can be achieved, if the target cores remain cold, i.e. if they are not exposed to ion beams. One of the methods used to provide such conditions is to rotate an ion beam with speed w around the target axis (Fig). The principal requirement of achieving high compression ratios is to provide homogeneous irradiation that is assumed to be resultant from ion beam rotation at high speeds. The efforts described consist in evaluation (in 1D approximation) of the requirements imposed on temporal and spatial characteristics of the ion beam rotated around the cylindrical target axis to gain high compression ratios.

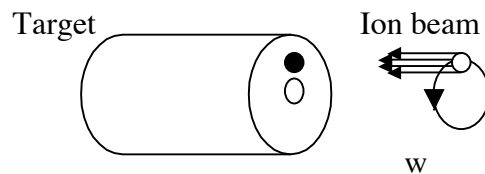


Fig. Scheme of the irradiated cylindrical target by rotated ion beam