

Abstract Submitted
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Alpha-Channeling with Plasma Waves in Mirror Plasmas ANDREY ZHMOGINOV, NATHANIEL FISCH, Princeton University — The alpha-channeling effect can be obtained by coupling waves resonating with alpha particles in mirror machines. Modes suitable for alpha-channeling implementation in mirror machines are identified and the achievable efficiency of alpha particle energy extraction is estimated. Methods of coupling external energy sources to the identified plasma modes are proposed. The feasibility of implementing alpha-channeling concept in existing mirror machines including Gamma 10 and AMBAL-M is discussed.

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