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Recent Astrophysics Results from ORELA and Possible Future Experiments at ORELA and SNS

1 Introduction ; 2 Recent ORELA Results and the Need for New Measurements ; 3 The Need for the SNS ; Acknowledgements ; References

Sensitivity of Isotope Yields to Reaction Rates in the Alpha Rich Freezeout 1

Introduction ; 2 The calculations ; 3 Web-based data display ; 4 Examples ; 5 Conclusion ; Acknowledgements ; References

; Neutron Reactions of Light Nuclei from Astrophysics & Nuclear Physics Interest

1 Introduction

Sommario/riassunto

The spallation neutron source (SNS) being built at the Oak Ridge National Laboratory (ORNL) will be by far the highest flux pulsed source of epithermal neutrons in the world when it comes on line in 2006. Although the main thrust of the science program at the SNS will be materials science, the facility could provide outstanding opportunities for research in nuclear astrophysics, fundamental symmetries, and applied nuclear physics. To review the current status of these fields and to begin to assemble the scientific case and the community of researchers for future experiments at the SNS, a work