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PERFORMANCES OF ACTINIDE TRANSMUTATION BASED ACCELERATOR-DRIVEN SYSTEMS (ADS) AT CIEMAT

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Abstract

The FACET group at CIEMAT is studying the properties and potentialities of several liquid metal-cooled ADS designs for actinide and fission product transmutation. The main characteristics of these systems are the use of lead or lead-bismuth eutectic as primary coolant, moderator and fuels made by transuranics.

The program has two main research lines. The first one is dedicated to the development of concepts, designs, operation models and computer simulation tools characteristics of this kind of systems. The second line includes the participation and the data analysis of the most advanced experiments in the field and international benchmarks.