

## AUSHANG

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Unser Zeichen:

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### Einladung zum IKET-Kolloquium

Zeit: Dienstag, 30. Juni 2015, 15.00 Uhr  
Ort: Bibliothek des IKET, Campus Nord, Bau 420, Raum 204  
Referent: Jan Leen Kloosterman, TU Delft, The Netherlands  
Titel: A Paradigm Shift in Nuclear Reactor Safety with the Molten Salt Reactor

#### Zusammenfassung:

Imagine an inherently safe reactor that produces all electricity world-wide for thousands of years, and recycles all actinides until fission.

The Molten Salt Fast Reactor (MSFR) can reach this goal. The cylindrical reactor core contains actinide-fluorides mixed in lithium-fluoride. The liquid salt is at ambient pressure and can freely expand upon heating, giving a strong negative reactivity feedback. The core is in its most reactive state and any geometrical change lead to lower reactivity. In case of hypothetical accidents, the fuel salt can automatically drain via freeze plugs into fail-safe tanks. The fuel salt is continuously cleaned and controlled in an integrated chemical plant. The MSFR can operate as a breeder reactor in the thorium fuel cycle or as a burner reactor fuelled with plutonium and minor actinides. In short: the MSFR excels in safety, sustainability and optimal waste management.

In this presentation the presenter will give an overview of the Molten Salt Reactor concepts, and of the work to be done within the HORIZON2020 project, called SAMOFAR.

gez. T. Schulenberg

Alle auswärtigen Besucher des Kolloquiums werden gebeten, ihren gültigen Personalausweis oder Reisepass mitzubringen.