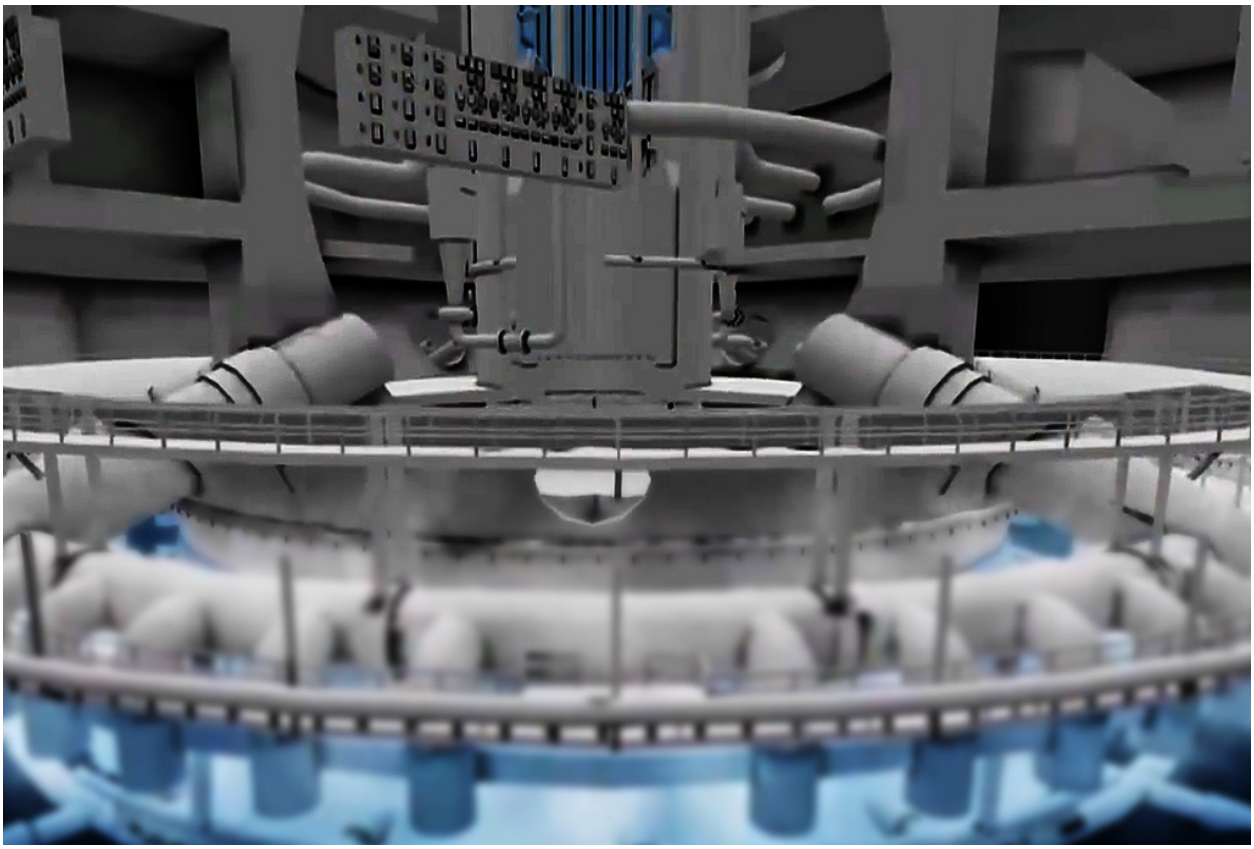
Probing Fukushima with cosmic rays should help speed cleanup of damaged plant

December 22, 2014



Probing Fukushima with cosmic rays should help speed cleanup of damaged plant

Thanks to an agreement with Toshiba Corp. to license a novel technology refined at Los Alamos National Laboratory, Los Alamos scientists will be heading to Japan to set up a remote sensor that will allow nuclear scientists to peer inside the damaged reactors at

the Fukushima Daiichi complex and get detailed pictures—without ever breaching the containment building.

1:42

Los Alamos, Toshiba probing Fukushima with cosmic rays

Muon tomography, a process that uses particles generated when cosmic rays interact with Earth's atmosphere to create pictures of dense objects, will show researchers high-resolution images of nearly all of the nuclear material inside the damaged reactor cores.

The detailed images could allow plant operators to more quickly develop and execute a cleanup strategy. Some estimate that muon tomography could help speed cleanup of the reactors by as much as a decade or more.

The technology can also potentially reduce cleanup costs and worker exposure to radioactive materials.

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