FEASIBILITY OF IFMIF-DONES FOR OTHER SCIENCE PROJECTS

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IFMIF-DONES - a powerful neutron irradiation facility for studies and certification of materials - is planned as part of the European roadmap to fusion electricity. Its main goal will be to study properties of materials under severe irradiation in a neutron field similar to the one in a fusion reactor first wall. It is a key facility to prepare for the construction of the DEMO Power Plant envisaged to follow ITER.

As part of the present deliberations about financing and siting a DONES facility, it is being considered to extend the objectives of IFMIF-DONES beyond its standard program of material studies for fusion reactors. Various scientific areas, such medical applications, nuclear physics, astrophysics, basic physics studies and industrial application of neutrons are under consideration as complementary research topics. A White Book report on "Complementary Scientific Programme at IFMIF-DONES" is under preparation.

The conclusions of the White Book will be presented identifying the most promising science projects that could be developed at IFMIF-DONES without compromising its main role. The possible implementation in IFMIF-DONES of these additional experiments will be also discussed.

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