



Contribution ID: 81

Type: **Poster**

## Porting application in rfusion VO

### **Project(s) or EGEE activity presenting the demo or poster (project or activity names only)**

NA4.2

### **Special requirements other than the set up mentioned in the CfA text.**

No requirements.

### **Abstract**

Application for two-dimensional modeling of microwave propagation in ITER plasma was gridified using GIF portal. User could choose variations of plasma and waves parameters, control computational process, download and view results of each variant separately or of all variants in an archive.

Application of modeling of two-dimensional diffraction pattern, and respective one-dimensional scattering-angle distribution, for x-ray diffraction by various carbon nanostructures in a randomly dispersed ensemble is gridified. This numeric code is used for interpretation of x-ray diffraction (XRD) data for the film deposits in tokamak T-10. User could choose variation of the size of nanostructure for each topology and the x-ray wavelength, download and view results of each variant separately or of all variants in an archive.

Application for multivariant tokamak T-10 edge plasma turbulence modeling and visualization is gridified. It is used for interpreting experimental data.

**Authors:** Dr KUKUSHKIN, Alexander (RRC "Kurchatov Institute"); Mr DYABILIN, Konstantin (RRC "Kurchatov Institute"); Mr MARUSOV, Nikolay (RRC "Kurchatov Institute"); Mr NEVEROV, Vlad (RRC "Kurchatov Institute"); Mr VOZNESENSKY, Vladimir (RRC "Kurchatov Institute")

**Presenter:** Mr MARUSOV, Nikolay (RRC "Kurchatov Institute")