

Abstract Submitted
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The IGNIS* Collaboration in the Broader Context of Fusion and Space Research** E. AZIZOV, KIAE, B. COPPI, MIT, E. VELIKHOV, KIAE, A. AIROLDI, IGNIS, F. BOMBARDA, A. CARDINALI, ENEA, G. CENACCHI, IGNIS, P. DETRAGIACHE, ENEA, G. GRASSO, Columbus, S. MANTOVANI, IGNIS, G. RUBINACCI, Un. Napoli — The IGNIS collaboration has the purpose to construct and operate the high field Ignitor machine designed to investigate D-T fusion burning plasmas close to ignition conditions, and is based on the decision by Italy and Russia to fund the relevant program jointly. The Troitzk site has been chosen in view of the important facilities that it has for D-T burning machines and of the outstanding tradition of accomplishments by the Kurchatov Institute that will be in charge of the machine operation. Building upon the existing talents in Italy and in Russia, the Ignitor program has been formulated in the broader context of the physics of high energy plasmas both in astrophysics and in the laboratory. This (also funded) initiative, welcomed by the international community that is active in both fields, is reflected in the high level scientific committee that advises the Ignitor program and by the results presented at the three interdisciplinary meetings held in Italy and Russia since 2010. New projects motivated by the IGNIS collaborations (e.g. concerning the diagnostics systems, and EC edge heating) are presented. *Ignis = fire in Latin; **Sponsored in part by KIAE, MIUR and CNR of Italy, and by the U.S. DOE.

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