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**Estimation of Electron Bernstein Emission in the TJ-II Stellarator** J.M. GARCÍA-REGAÑA, A. CAPPA, F. CASTEJÓN, Laboratorio Nacional de Fusión, EURATOM-CIEMAT, Madrid, Spain, M. TERESHCHENKO, BIFI: Instituto de Biocomputación y Física de Sistemas Complejos, Zaragoza, Spain / Prokhorov Institute of General Physics, Moscow, Russia — In order to study experimentally the viability of first harmonic EBW heating in the TJ-II stellarator by means of the O-X-B technique [1], an EBE diagnostic was recently installed [2]. In the present work a theoretical estimation of the EBW radiation in the TJ-II plasmas have been carried out making use of the ray tracing code TRUBA [3]. The line of sight of the EBE diagnostic may be modified using an internal movable mirror and therefore, for comparison with the experimental results, the theoretical O-X-B emission window has been determined. Experimental density and temperature profiles obtained in NBI discharges are considered in the simulations.

**References:**

- [1] F. Castejon *et al*, *Nucl. Fusion* **48**, 075011 (2008).
- [2] J. Caughman *et al*, *Proc. 15th Joint Workshop on ECE and ECRH*, Yosemite, USA (2008).
- [3] M. A. Tereshchenko *et. al*, *Proc. 30th EPS Conference on Contr. Fusion and Plasma Phys.*, **27A**, P-1.18 (2003).

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