Design of the ITER ICRF Antenna

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The CYCLE consortium has been designing the ITER ICRF antenna since March 2010, supported by an F4E grant. Following a brief introduction to the consortium, this paper: describes the present status and layout of the design; highlights the key mechanical engineering features; shows the expected impact of cooling and radiation issues on the design and outlines the need for future R&D too support the design process. A key design requirement is the need for the mechanical design and analysis to be consistent with all requirements following from the RF physics and antenna layout optimisation. As such, this paper complements that of Durodie et al [1].

[1] Durodie et al: this conference

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