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Development of a 704.4 MHz CH cavity using additive manufacturing

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A novel 704.4 MHz CH structure is under development. Due to its relatively small spatial dimensions (22 cm in diameter and 33.7 cm in length), the additive manufacturing (AM) technology is an attractive choice for the construction. For a proof of concept, a simplified model with one stem, one drift tube, and a small part of another stem was printed with copper. This structure was also foreseen for CW operation, so the design of the water-cooling channels inside the drift tubes and stems have been optimized and checked by the Ansys simulation. The progress with the realization of the 704.4 MHz CH structure will be presented.

Funding Agency

Footnotes

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Yes

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