## IPAC'24 - 15th International Particle Accelerator Conference



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## Full simulations of the Diamond-II storage ring commissioning and possible improvements of procedures

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To provide confidence in the future commissioning of the Diamond-II storage ring, realistic specifications for the error tolerances have been established. Based on these values, commissioning simulations have been conducted starting from on-axis injection through to stored beam and finally the alleviation of beta-beating caused by insertion devices. The goal of these studies is to develop a robust commissioning procedure that stays within the magnet strength limits using the statistics of many random machines simulated. In this paper we summarize these studies and present the results at each stage. Other topics such as testing on Diamond and comparisons of alternative commissioning methods are also discussed.

Footnotes

**Funding Agency** 

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**Region represented** 

Europe

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