



International Design Study for the **Neutrino Factory**

IDS-NF-???

Other preprint and report numbers

Reference Design Report

The IDS-NF collaboration

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Foreword

This is what we said in the IDR ...

The International Design Study for the Neutrino Factory (the IDS-NF) [1] was established by the community at the ninth “International Workshop on Neutrino Factories, super-beams, and beta-beams” which was held in Okayama in August 2007 [2]. The IDS-NF mandate is to deliver the Reference Design Report (RDR) for the facility on the timescale of 2012/13 [3]. The RDR is conceived as the document upon which requests for the resources to carry out the first phase of the Neutrino Factory project can be made. The RDR will include: the physics performance of the Neutrino Factory and the specification of each of the accelerator, diagnostic, and detector systems; an estimate of the cost of the facility; and an estimate of the schedule for its implementation. The RDR will also include a discussion of the remaining technical risks and an appropriate risk-mitigation plan.

Executive summary

Lead author: KL

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1 Introduction

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2 Physics at the Neutrino Factory

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3 The Neutrino Factory Accelerator Complex

Lead authors: JSB, JPa

4 Detector systems for the Neutrino Factory

Lead authors: PS, ABr, JM, RT

5 Conclusions

Lead author: KL

Acknowledgements

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A PPEG appendices

Lead author: PH

B Accelerator working group appendices

Lead authors: JSB, JPa

C Detector working group appendices

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D Cost estimate and incremental development

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