

Course B: RF Technology
Lecture B2 – Superconducting RF

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Part-I Superconducting RF Cavity

- 1. Superconductivity Basics for SRF Cavity**
- 2. Niobium Material for SRF Cavities**
- 3. SRF Cavity Design**

Part II Cavity Auxiliaries

4. HOM Issue

5. Niobium Cavity Fabrication

6. Cavity Tuning

Part-III SRF Cavity Technology

- 7. Performance Limitations and Cures**
- 8. Surface Preparation Techniques**
- 9. Performance Evaluation**

Part-IV SRF Technology and ILC R&D

- 10. Lorentz Detuning**
- 11. Input Coupler**
- 12. Cavity Dressing**
- 13. ILC Cryomodule**
- 14. Cryogenics**
- 15. Cavity R&D for ILC**