## DRAFT outline of SiD - For discussion by SiD P.N. Burrows 13 August 2008

In roughly logical order – details to be discussed; page estimates not to be taken too seriously, but note should be around 100 pages total!

I Introduction (5)

- ILC physics (brief)
- SiD philosophy and rationale; emphasise strengths, uniqueness ...
- Outline of SiD design, and optimization process
- Pointer to cost and future R&D issues (later)
- SiD organization

II Global issues (10)

- The machine-detector interface: rationale, engineering drawings ...
- IR hall, assembly, access ...
- Push-pull issues, to include: strategy, time estimate, alignment, calibration ...
- Backgrounds

III Subsystems: for each, to include:

- Performance requirements, pointers to physics benchmarks
- Design outline, including engineering details, drawings etc
- Technology options
- Baseline choice(s)
- Front-end electronics
- Performance: spatial resolution, efficiencies, energy/momentum resolution ...

Tracking system (10) EM calorimeter (10) HCAL (10) Forward systems (5) Magnet (5) Muon system (5) DAQ (1) Simulation tools + infrastructure, PFA ... (5)

IV Benchmarking results (25)

V Cost estimate (5)

VI R&D (3) to include:

- Needs for further R&D
- Plans, goals, benchmarks, timescales

Summary (1)

Total pages: 100