

Gunn Diode Oscillator Minutes

David Headland

2004-02-02 14:00

Attendance

- Fourth year students:
 - R Wan.
 - JM Higginbotham.
 - MP Gaskill.
 - DP Headland.
 - RE Irwin.

Apologies

- AJ Nelms.

Approvals

- The minutes from the previous meeting were approved.

Radial line transformer

- The radial line transformer and radial disc functions were discussed.
- The Gunn diode has an associated capacitance.

-
- The radial line transformer has two functions:
 - Spreading the electric field out to fill the waveguide.
 - Be an inductor to act as a resonant circuit for the oscillator.
 - If using the fundamental frequency to resonate, the radial line transformer must be used to extract the second harmonic.

Formal presentation

- Slide numbers need adding.
- Hand-outs need creating.
 - Copy of the slides with an area for notes.
 - Time plan attached.
- Shadows under text have appeared and need removing.
- Changes to slides were discussed and marked for change after the meeting.
- Summary section was discussed. Suggested items:
 - Not used: Research, simulation, building, testing, proposed work.
 - What we have done.
 - * Research: based on the Barth paper. Mention differences.
 - * Simulation: Waveguide, software, radial line transformer.
 - * Testing: Commercial model, development of the plan.
 - * Building: Designs and manufacture.
 - Leave the current state out, that should be obvious from other sections.
 - What we're going to do should be split into four sections as above.

Proposed actions

- | | |
|-----------------|--|
| All | Tweak slides if required: Deadline: 23:59:59 2004-02-03. |
| All | Finish all preparations for the presentation. |
| JM Higginbotham | Provide photograph for one of the slides. |

Next meeting

Time Wednesday 4 February 2004, 12:00.

Place D floor coffee room.

Meeting adjourned, 17:10.