



Presentations in the WP4 session

- Introduction – Walter Wuensch, CERN
- Review of the baseline rf module design and high repetition rate options – David Alesini, INFN
- Linac layout – Markus Aicheler, Helsinki
- Progress towards the 36 GHz, 3 MW, 2 μ s and 1 kHz gyrokystron plus 48 GHz gyrokystron – Laurence Nix, Strathclyde
- Plans for, and progress on, Industrialization task, WP4 – Miranda van den Berg, VDL



General observations:

- D4.1 done
- Baseline rf system and module is in good shape, overall parameters fixed, going to detailed design.
- Parameters consistent with those used and needed in other work packages.
- Harmonic linearizer rf source advancing well, options even emerging.
- Industrialization will focus on accelerating structures, work started.
- Started uploading parameter tables, specifications, etc. in WP4 part of PBS. This is to provide reference documents for design work as well as continuous reporting.
- Serious work underway for high repetition rate operation. **I would like to suggest some terminology to clarify the discussion.**



We have a number of options for high/low repetition, low/high energy operation:

- **Dual mode** – Single rf source, single linac run in two operating modes
- **Dual source** – Single linac with two sources
- **Dual linac** – two distinct linacs with different rf sources

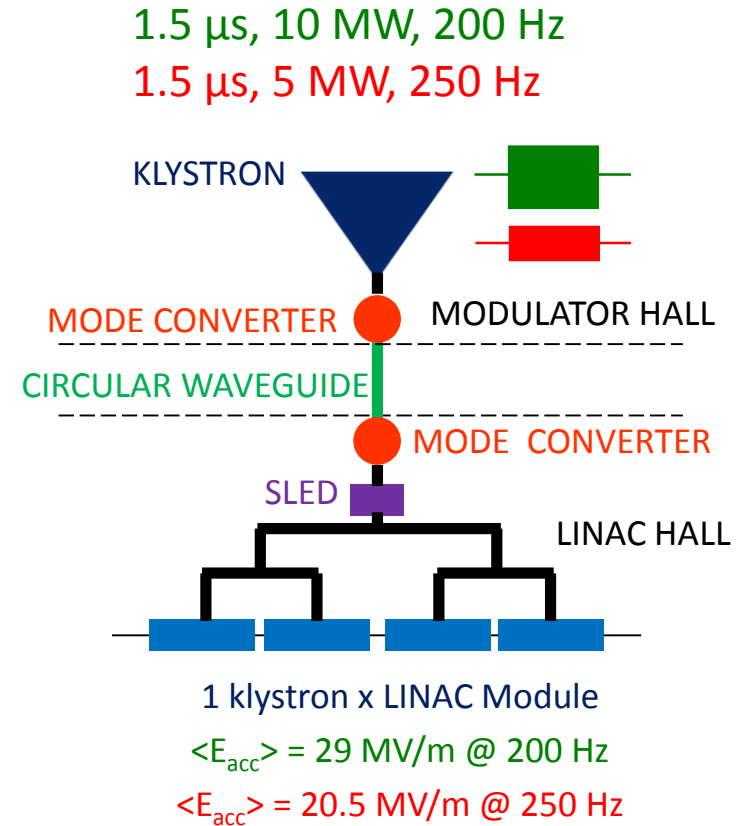


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Comments:

- Cheapest
- Limited increase in repetition rate
- Linac optics needs to operate at two gradient



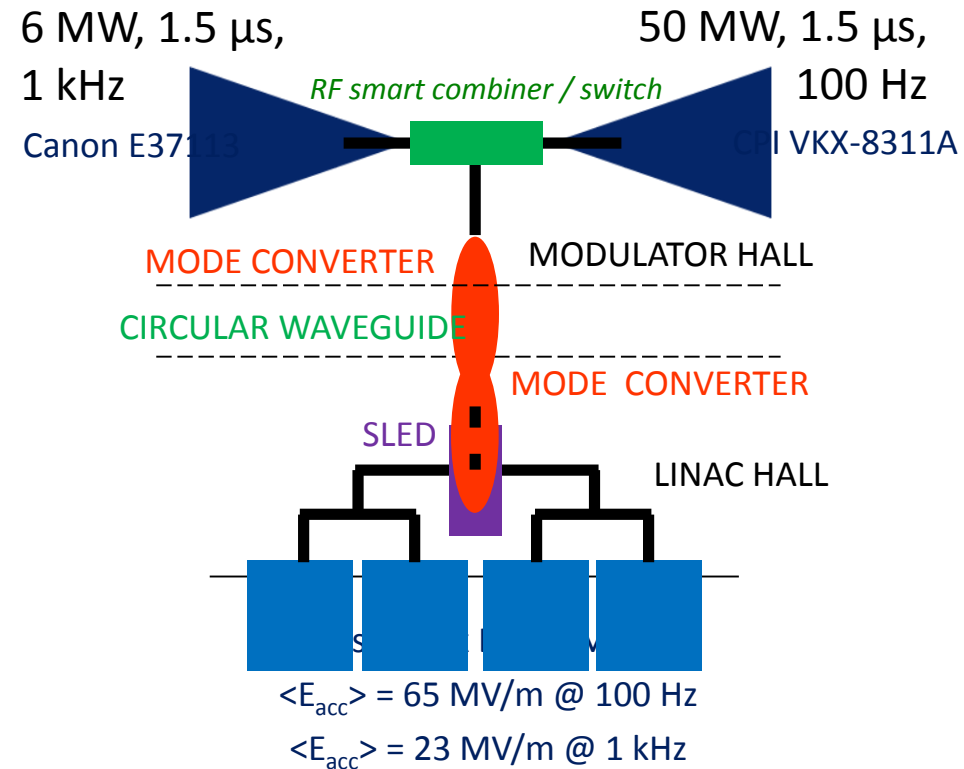
S. Gallo

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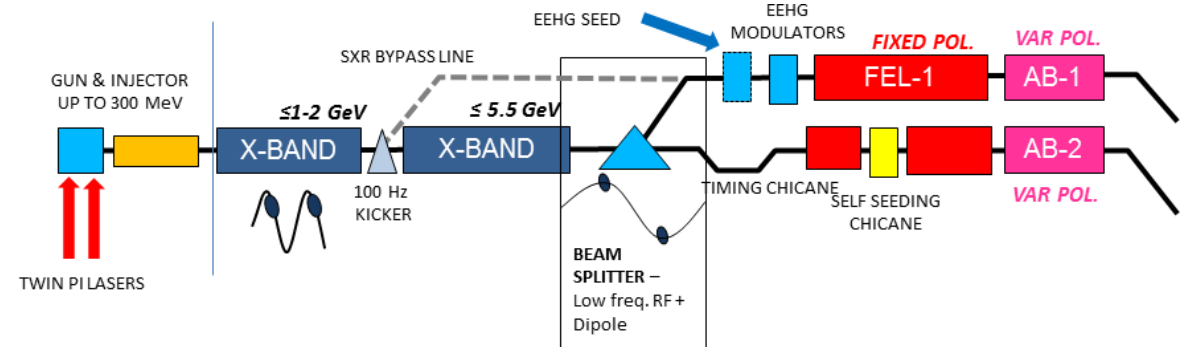
- More expensive
- Full repetition rate
- Linac optics needs to operate at two gradient



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Comments:

- Luxury version
- Sequence - 9 low energy pulses, 1 high energy pulse, 9 low energy pulses, etc. at a pulse repetition rate of 1 kHz
- Two distinct linac rf systems and modules – high rep rate linac not designed yet
- Longer due to reduced gradient in first module

J. Clarke, N. Thompson



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Thank you!



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