



EUROPEAN PLASMA RESEARCH ACCELERATOR WITH EXCELLENCE IN APPLICATIONS

High Gradient Laser Plasma Accelerating Structure WP3

Brigitte CROS – Zulfikar
NAJMUDIN



- Definition of tasks and identification of contributions from the different people:
 - discussions in Pisa and email exchanges
 - Detailed discussion of work progress planned on Oct 26th (programme on next slide)
- Contribution to the definition of baseline parameters : suggestion for the distribution of work

- Preparation of a meeting on October 26th focussed on the discussion of Plasma structures design (task 3.2)
- Tentative agenda (10 am to 6 pm):
 - * **Reminder of WP3 objectives** and the first milestone report due in April 2017
 - * **Status of work progress:** contributions related to task 3.2, ie
 1. - define regime of operation: overview presentation of results plus discussion to downselect the schemes that should be studied in detail;
 2. - Plasma creation: one or two presentations and discussion
 3. - Plasma confinement: one or two presentations and discussion
 4. -Injection techniques: one or two presentations and discussion
 - * **Discussion on the next steps/** other tasks/ future meetings

- Contribution to the definition of baseline parameters : suggestion for the distribution of work
 - Split the design into 8 cases,
 - distribute the cases among interested people (or groups of people) to have their feedback
 - Expected feedback: refined parameters, tolerances, references simul & exp, evaluation of reliability, any other comments...

From baseline parameters

- **Case 1:** LWFA with internal injection and acceleration to 1GeV (**Case 1A**) or 5 GeV (**Case 1B**).
- **Case 2:** LWFA with external injection (LWFA) and acceleration to 1GeV (**Case 2A**) or 5 GeV(**Case 2B**).
- **Case 3:** LWFA with external injection (RF) and acceleration to 1GeV (**Case 3A**) or 5 GeV (**Case 3B**).

- **Case 4:** LWFA with **internal** injection and acceleration to 1GeV and staging to 5 GeV
- **Case 5:** LWFA with **external injection (LWFA)** and acceleration to 1GeV and staging to 5 GeV
- **Case 6:** LWFA with **external injection (RF)** and acceleration to 1GeV and staging to 5 GeV

- **Case 7:** PWFA with acceleration to **Case 7A:1** GeV or **case7C: 5 GeV**
- **Case 8 :** Hybrid scheme, LWFA with **internal injection (LWFA)** and acceleration to 1GeV and staging to 3 GeV

- Position still vacant at CNRS-LPGP

- Next meeting of WP3 on October 26th: registration is encouraged to facilitate organisation