## 3rd European Advanced Accelerator Concepts Workshop



Contribution ID: 261

Type: talk

## Overview of Plasma Lens Experiments and Recent Results

Thursday, 28 September 2017 08:30 (30 minutes)

Beam injection and extraction from a plasma module is still one of the crucial aspects to solve in order to produce high quality electron beams with a plasma accelerator. Proper matching conditions require to focus the incoming high brightness beam down to few microns size and to capture a high divergent beam at the exit without loss of beam quality.

Plasma-based lenses have proven to provide focusing gradients of the order of kT/m with radially symmetric focusing thus promising compact and affordable alternative to permanent magnets in the design of transport lines.

In this talk an overview of recent experiments and future perspectives of plasma lenses is reported.

Primary author: CHIADRONI, Enrica (LNF)Presenter: CHIADRONI, Enrica (LNF)Session Classification: Plenary 7

Track Classification: Invited Plenary Talk