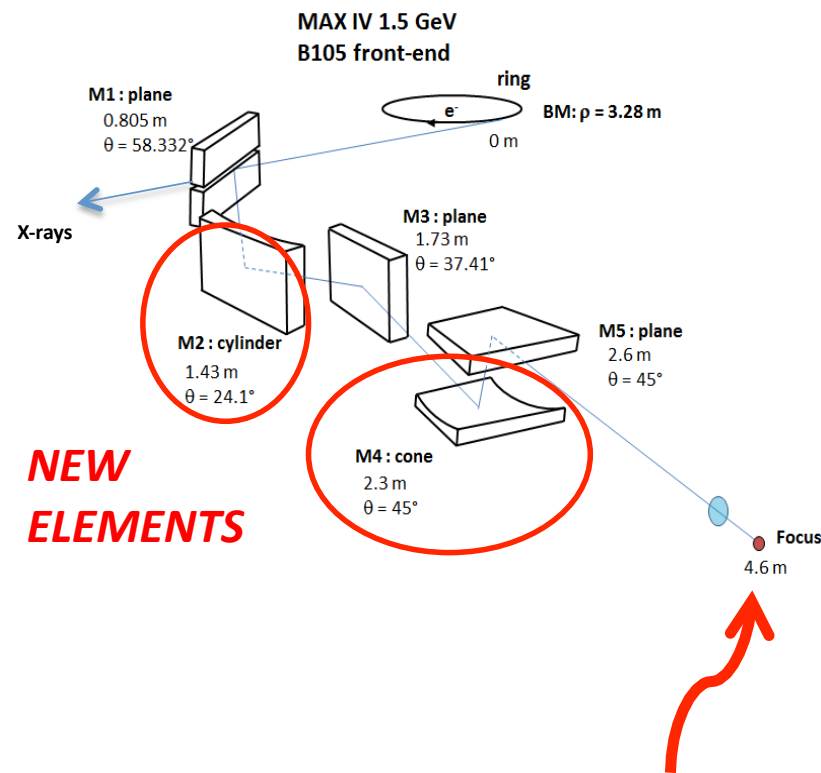


New low-emittance IR-beamline optics for 1.5 GeV, MAX IV

Ref: T. Moreno, Optimized IR synchrotron beamline design,
J. Synch. Rad. 22, 1163 (2015).

MAX-IV 1.5, B105 *NEW* IR beamline front-end layout



Low emittance optics increase the brilliance by **x100** @ focus as compared to classical optics

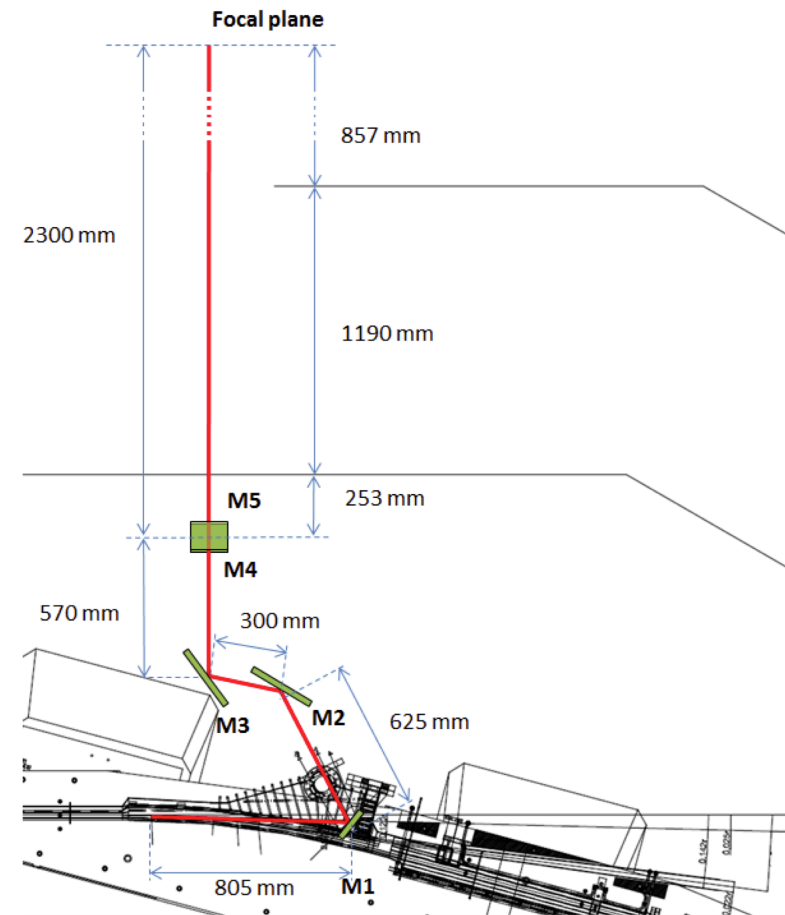
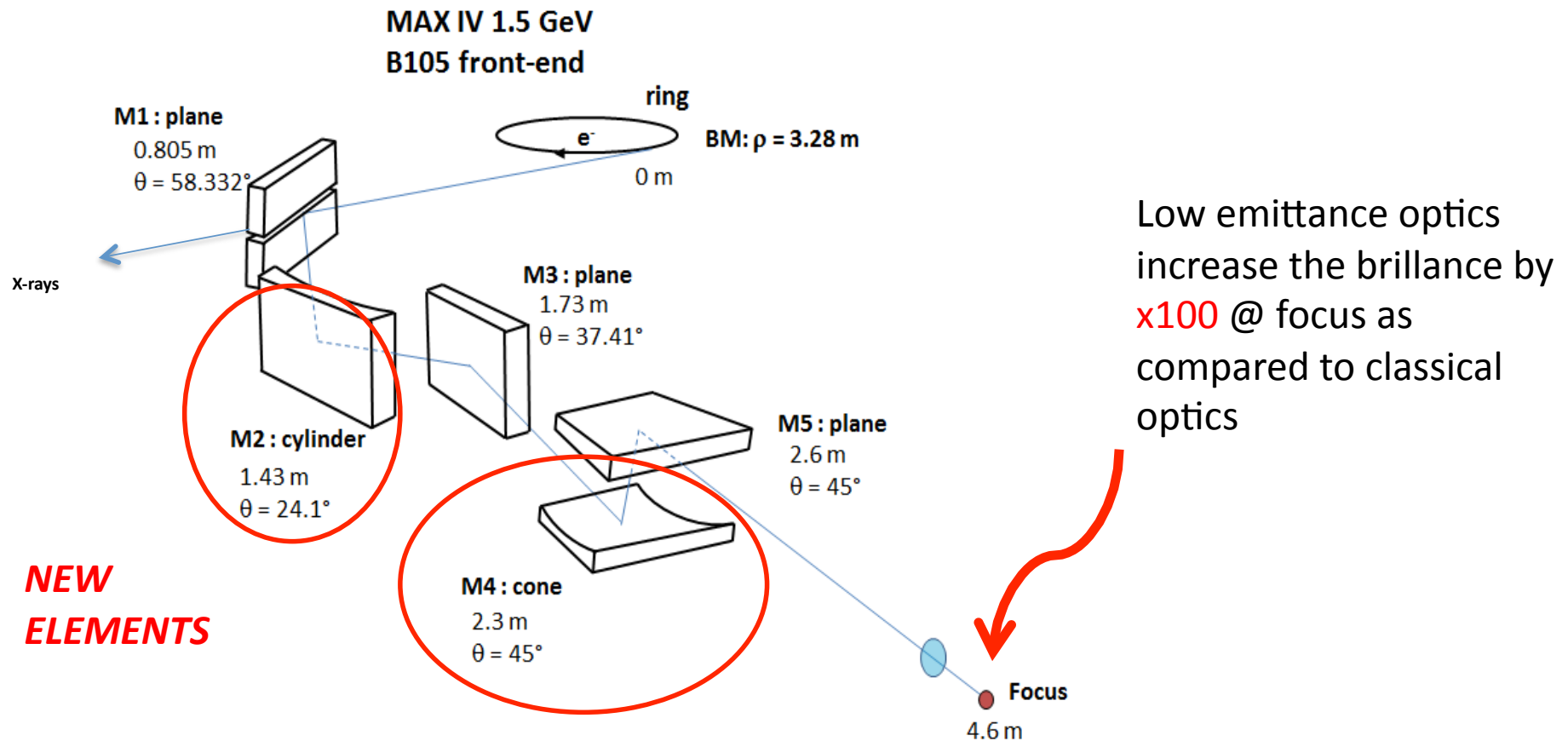


Figure 1: B105 IR beamline front-end layout

MAX-IV 1.5, B105 *NEW* IR beamline front-end layout



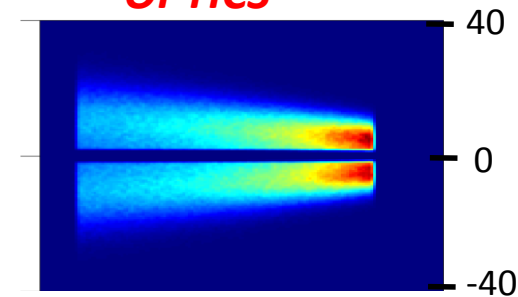
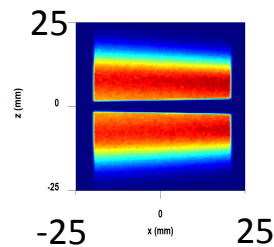
Cross-section of the IR-beams after exit mirror M8

Distance
from source

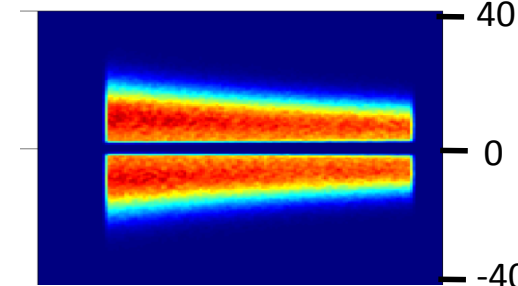
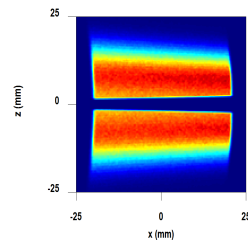
**NEW
OPTICS**

**CLASSIC
OPTICS**

6.4 m

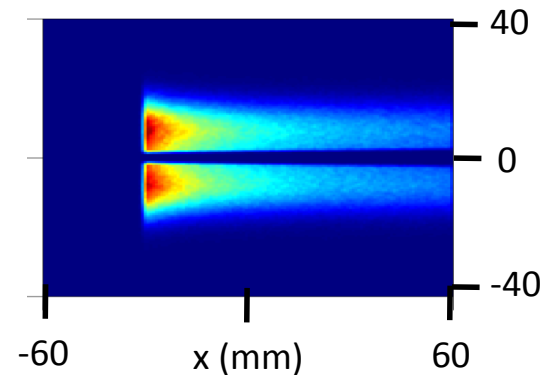
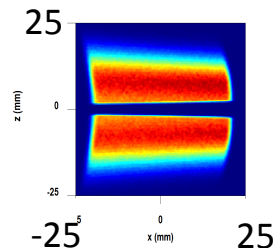


8.4 m



10.4 m

z (mm)



x (mm)

x (mm)

x (mm)

T. Moreno
P. Dumas
P. Uvdal

Photon Flux at different IR -beamlines

