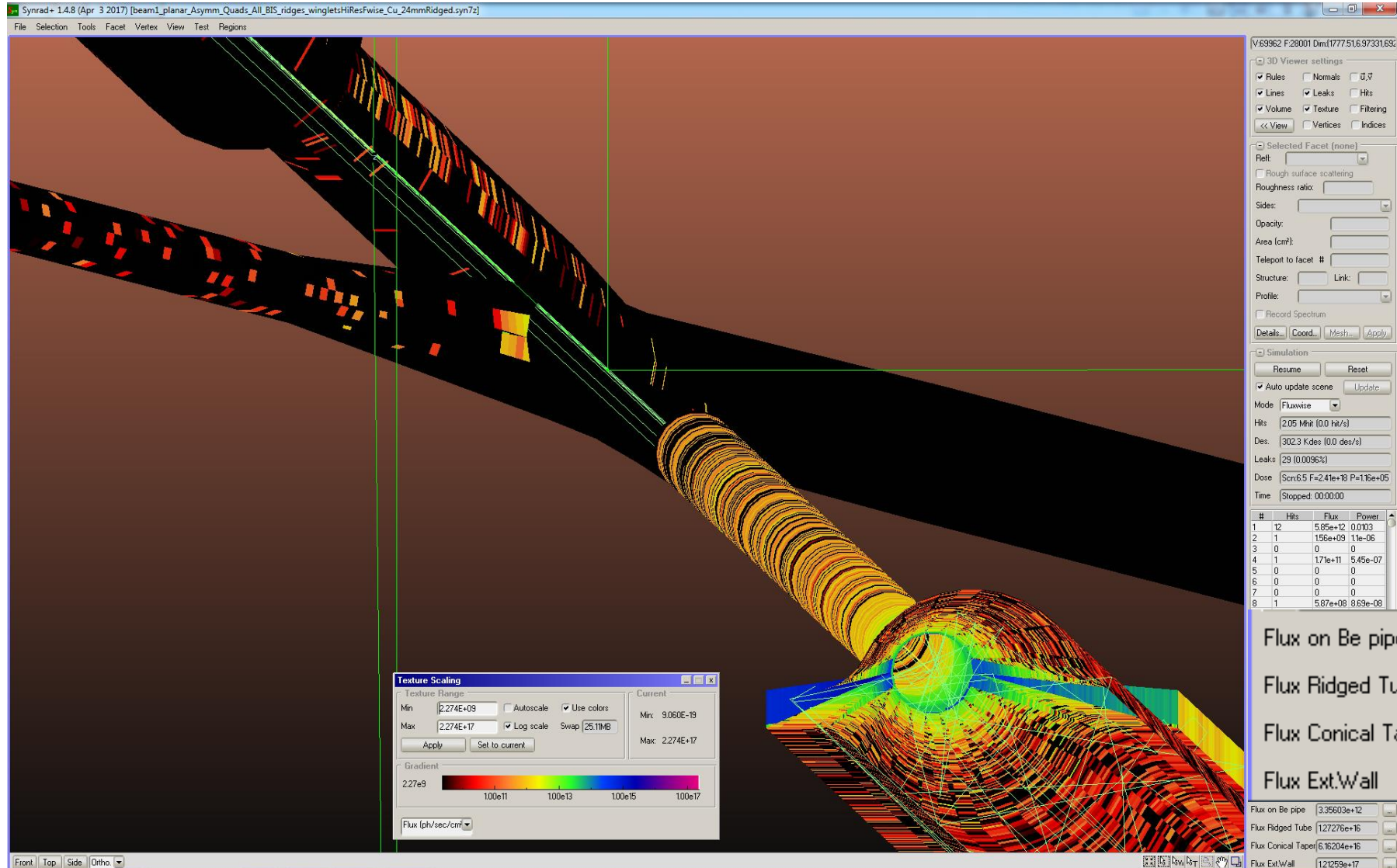
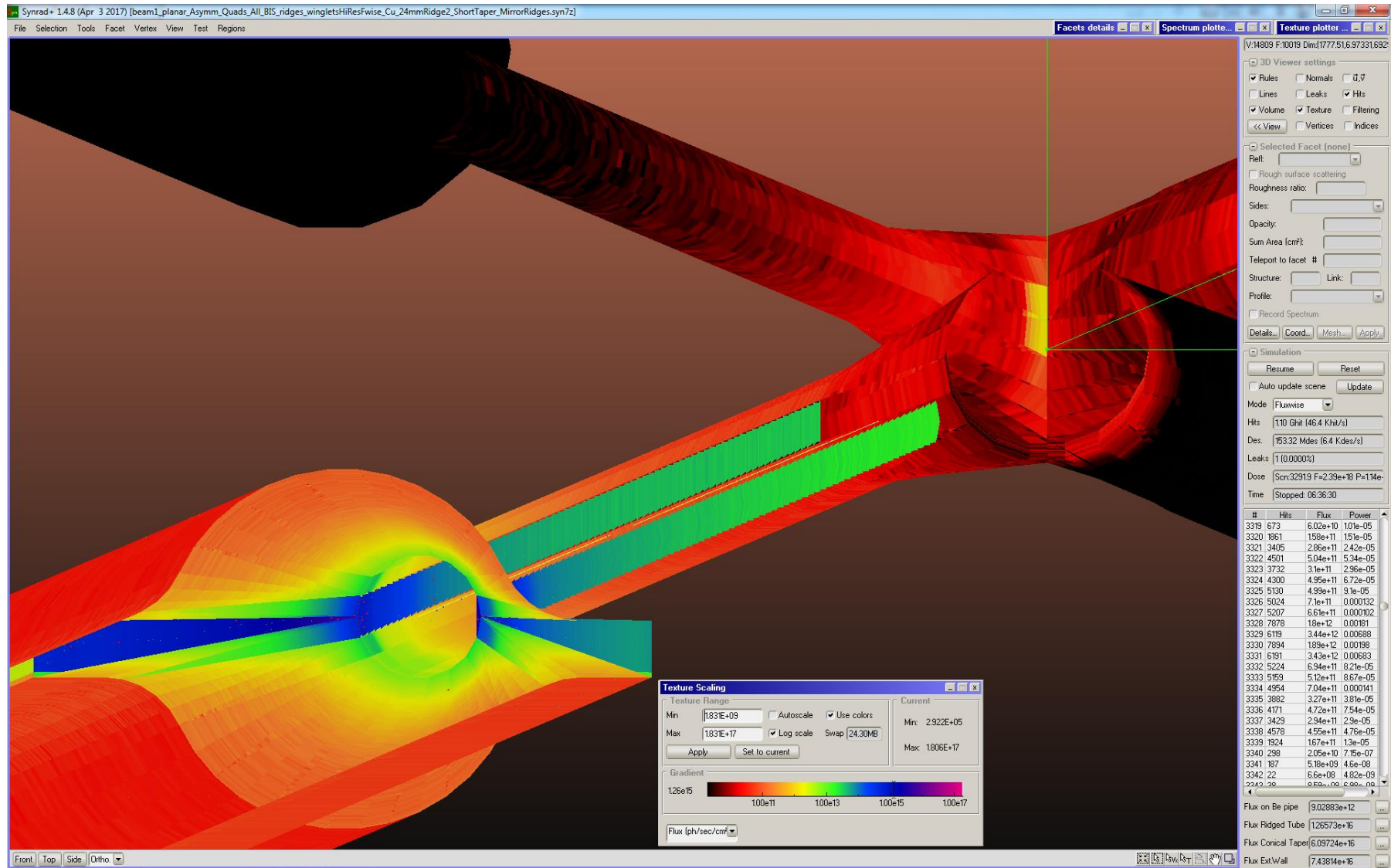


10th FCC-ee MDI Meeting

R. Kersevan TE-VSC-VSM, 27 April 2017

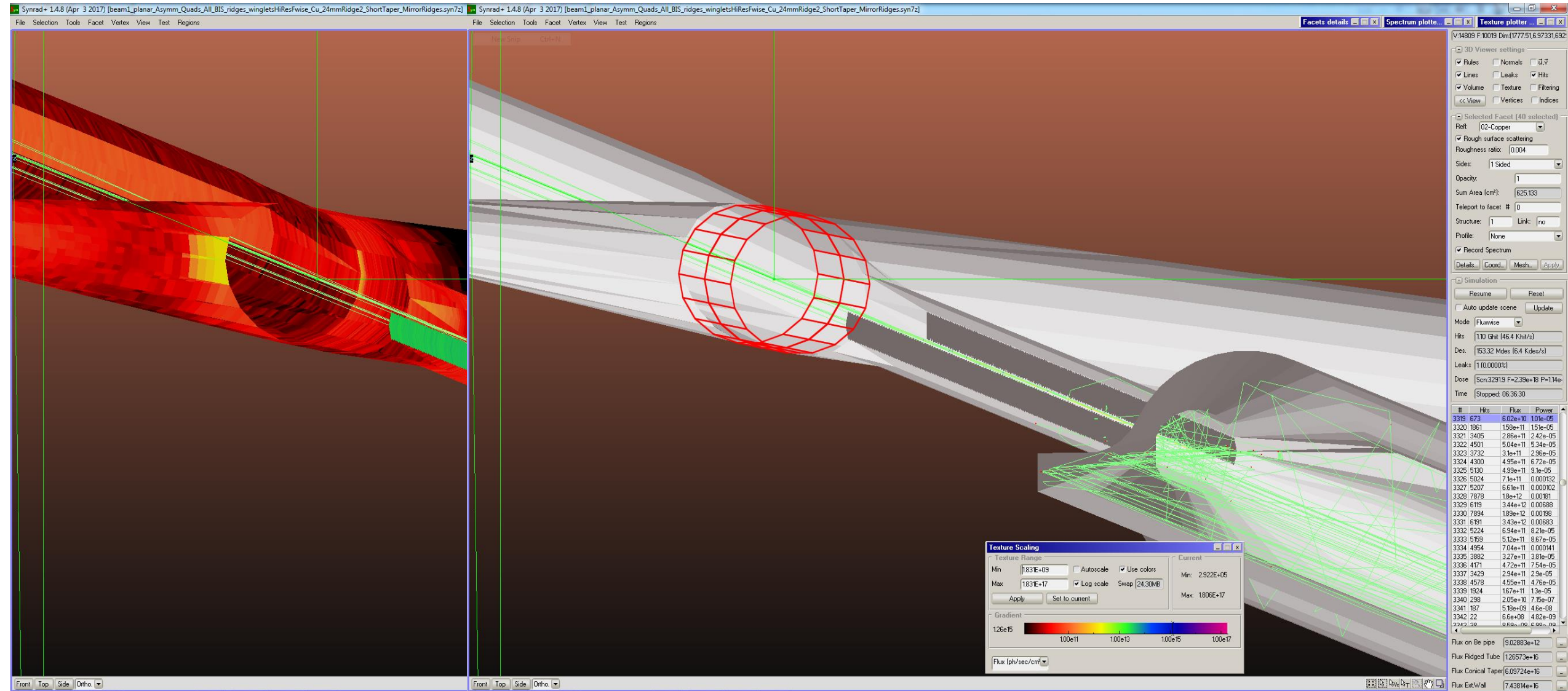


SYNRAD+ Simulation of the FCC-ee T-pole IR, with Conical Sawtooth Profile (2π about the axis)



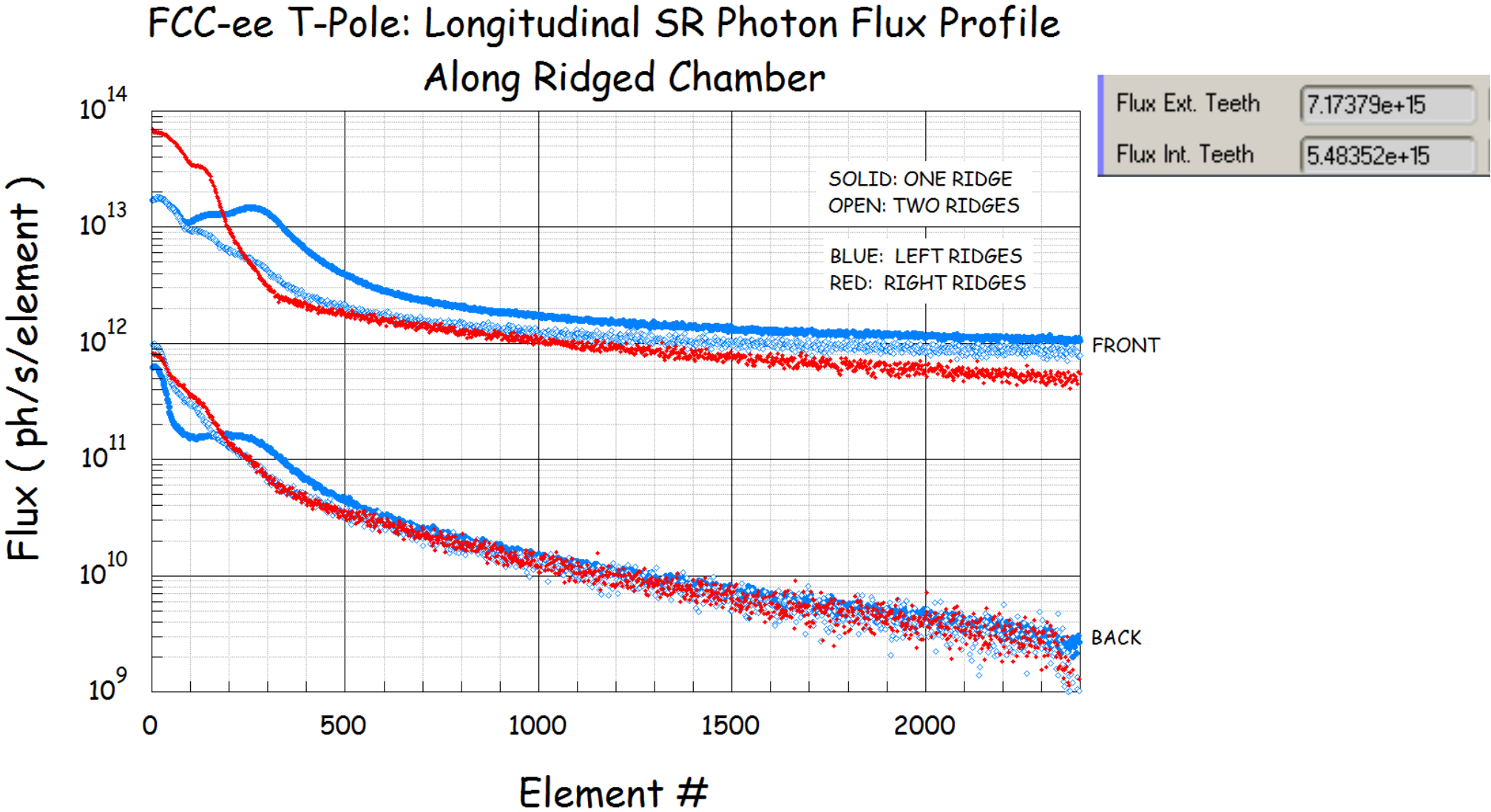
SYNRAD+ Simulation of the FCC-ee T-pole IR, with Sawtooth Profile (2 sides)

SYNRAD+ Simulation of the FCC-ee T-pole IR, with Sawtooth Profile (2 sides)



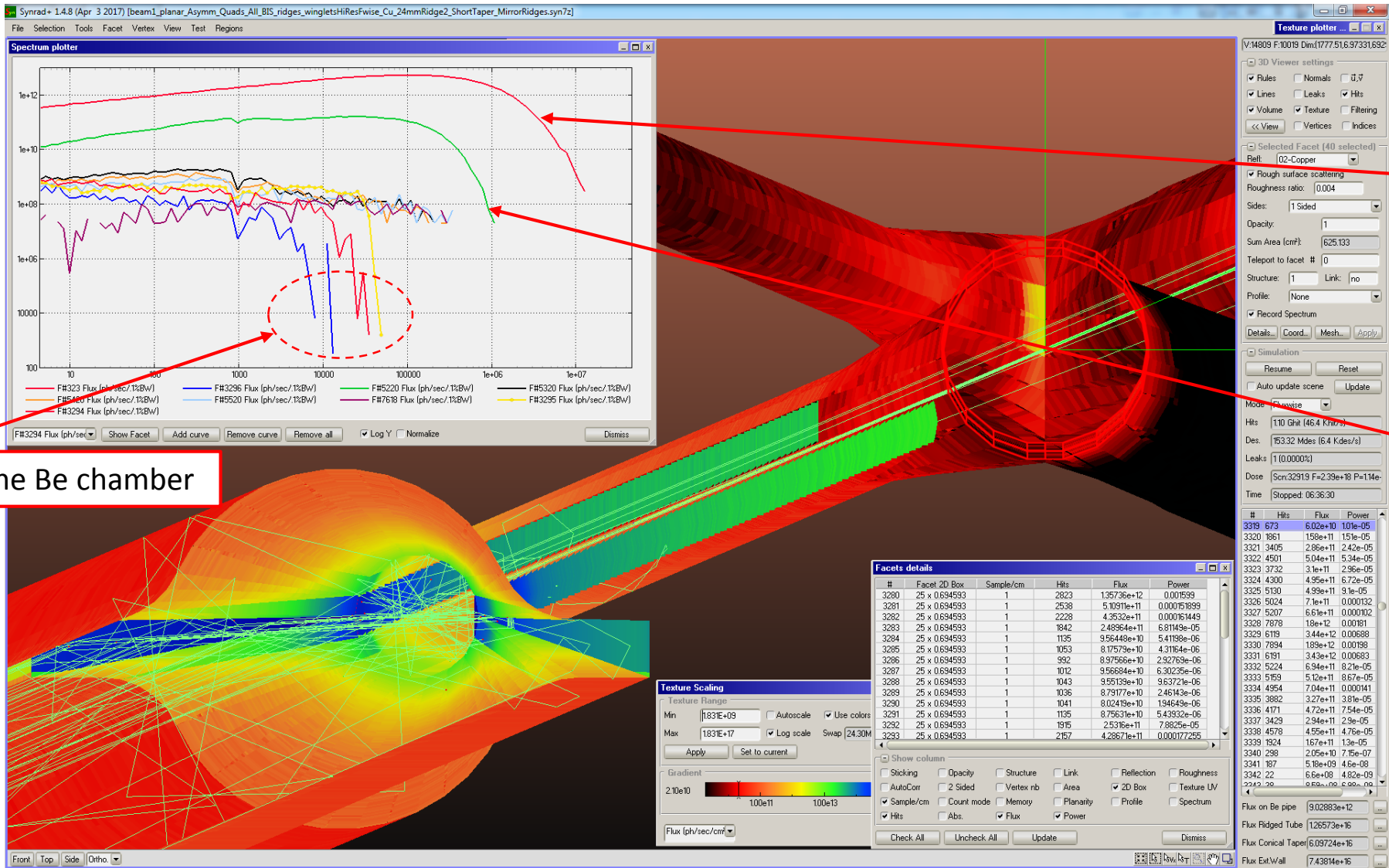
Looking from the other side, with ray traced; Be chamber in red (plot on right)

SYNRAD+ Simulation of the FCC-ee T-pole IR, with Sawtooth Profile (2 sides)



Longitudinal Flux Distribution along the 1x and 2x1200 Triangular Teeth (“ridges”);
Total length of 24 mm ID pipe is 6 m

SYNRAD+ Simulation of the FCC-ee T-pole IR, with Sawtooth Profile (2 sides)



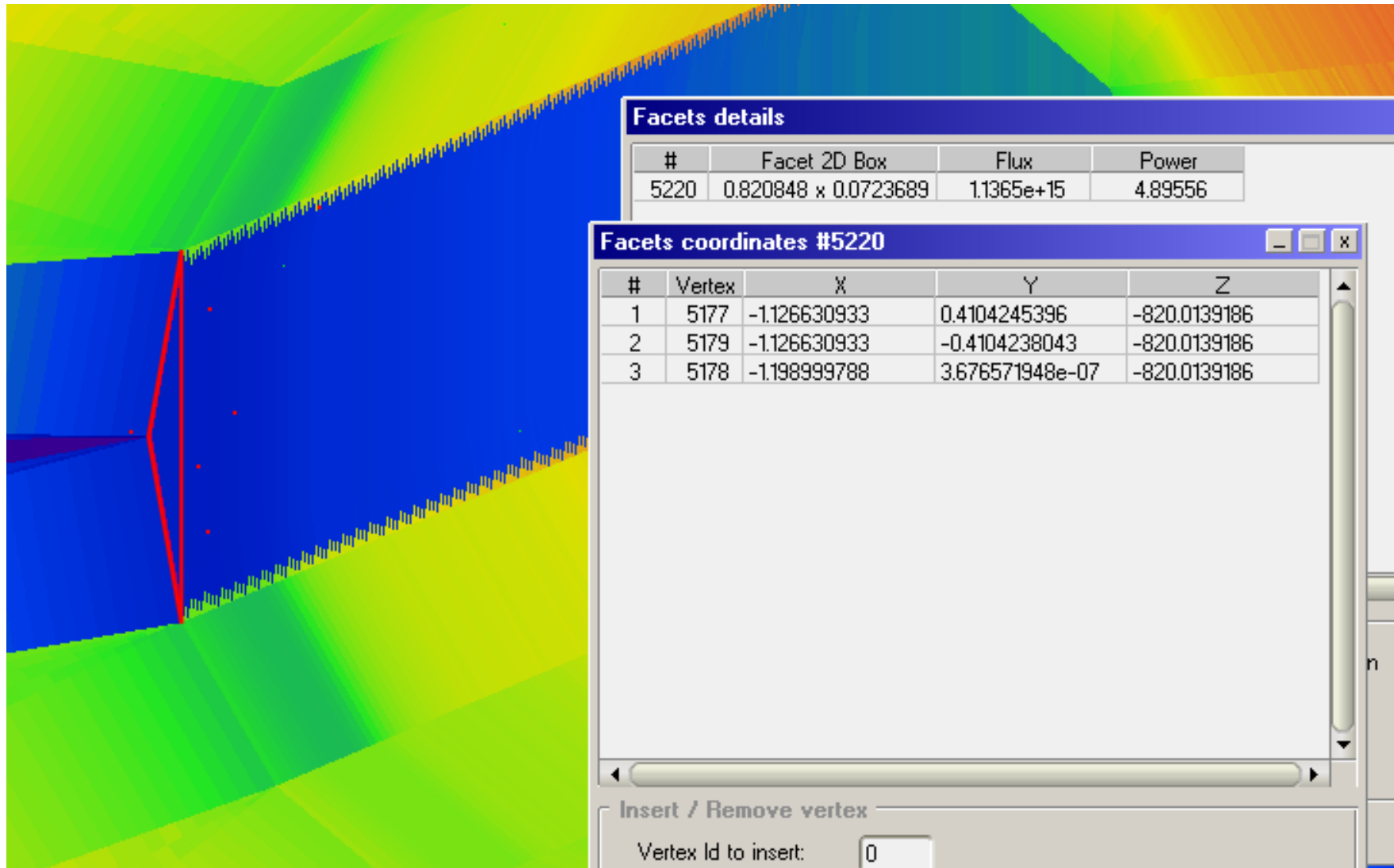
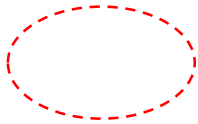
Total spectrum through IP (with high-energy contribution from 4 IP Quads)

First External Tooth

These 3 belong to the Be chamber

Flux Spectra Absorbed on Selected Facets; No Compton and No Fluorescence contributions

SYNRAD+ Simulation of the FCC-ee T-pole IR, with Sawtooth Profile (2 sides)



First non-shadowed tooth; Higher Power and Flux, still within reasonable limits