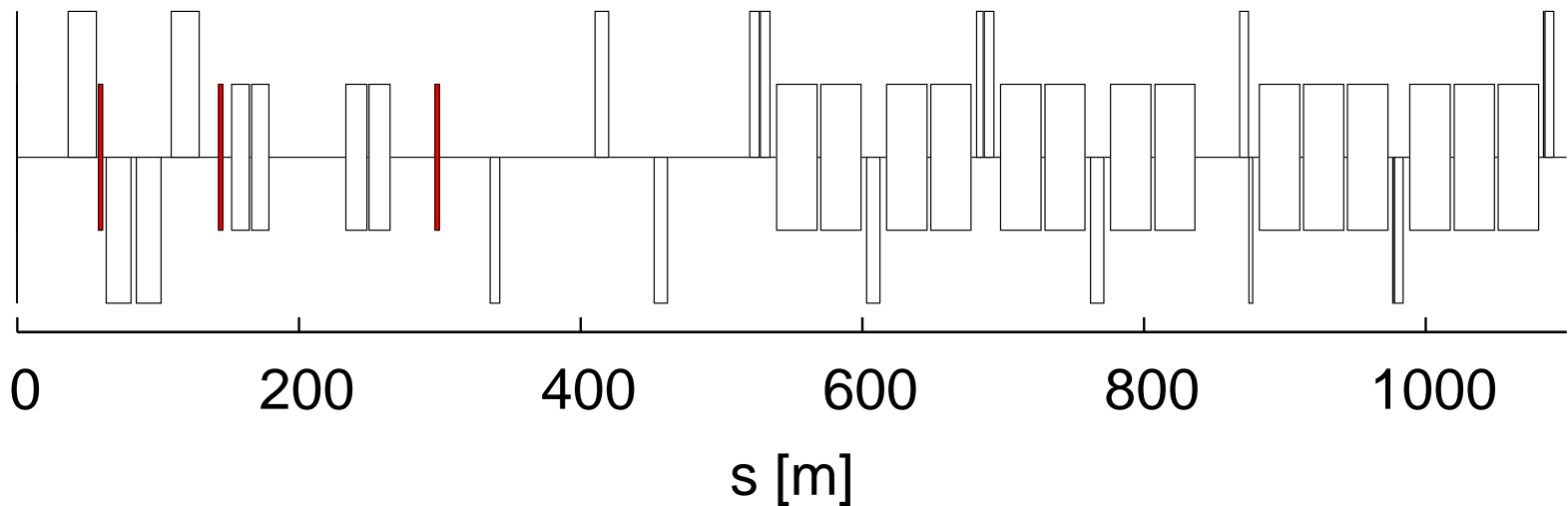# FCC-hh IR to arc considerations
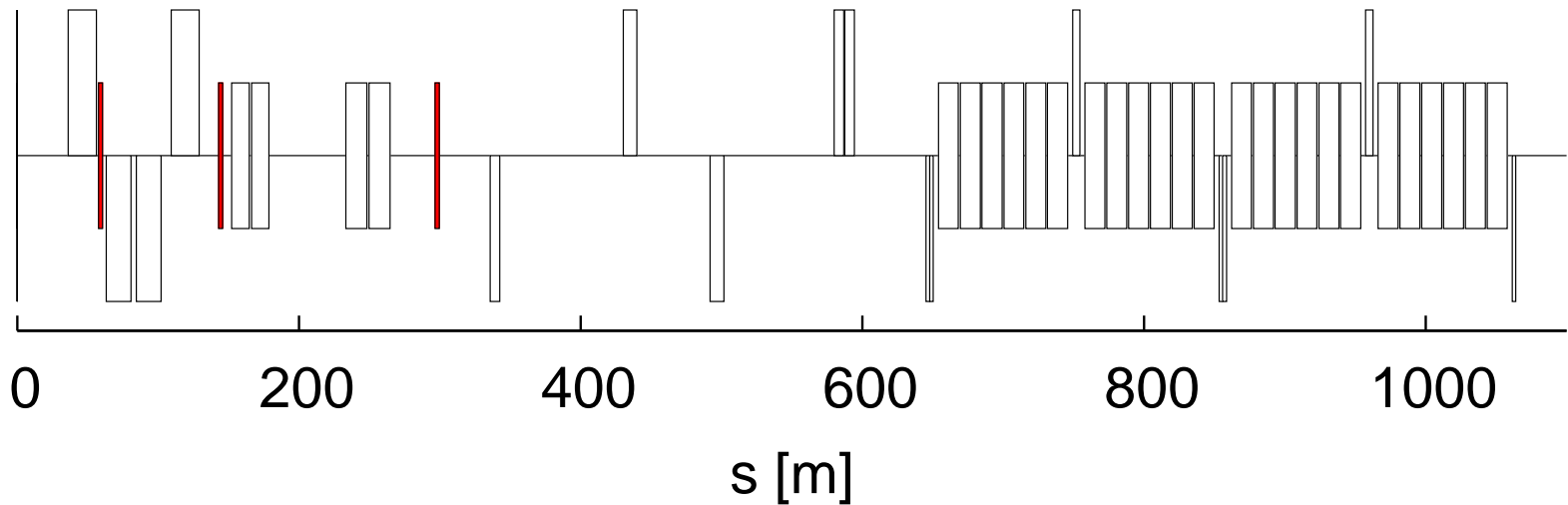
Roman Martin
Rogelio Tomas

Interaction region and DS

FCC-hh IR with LHC style DS

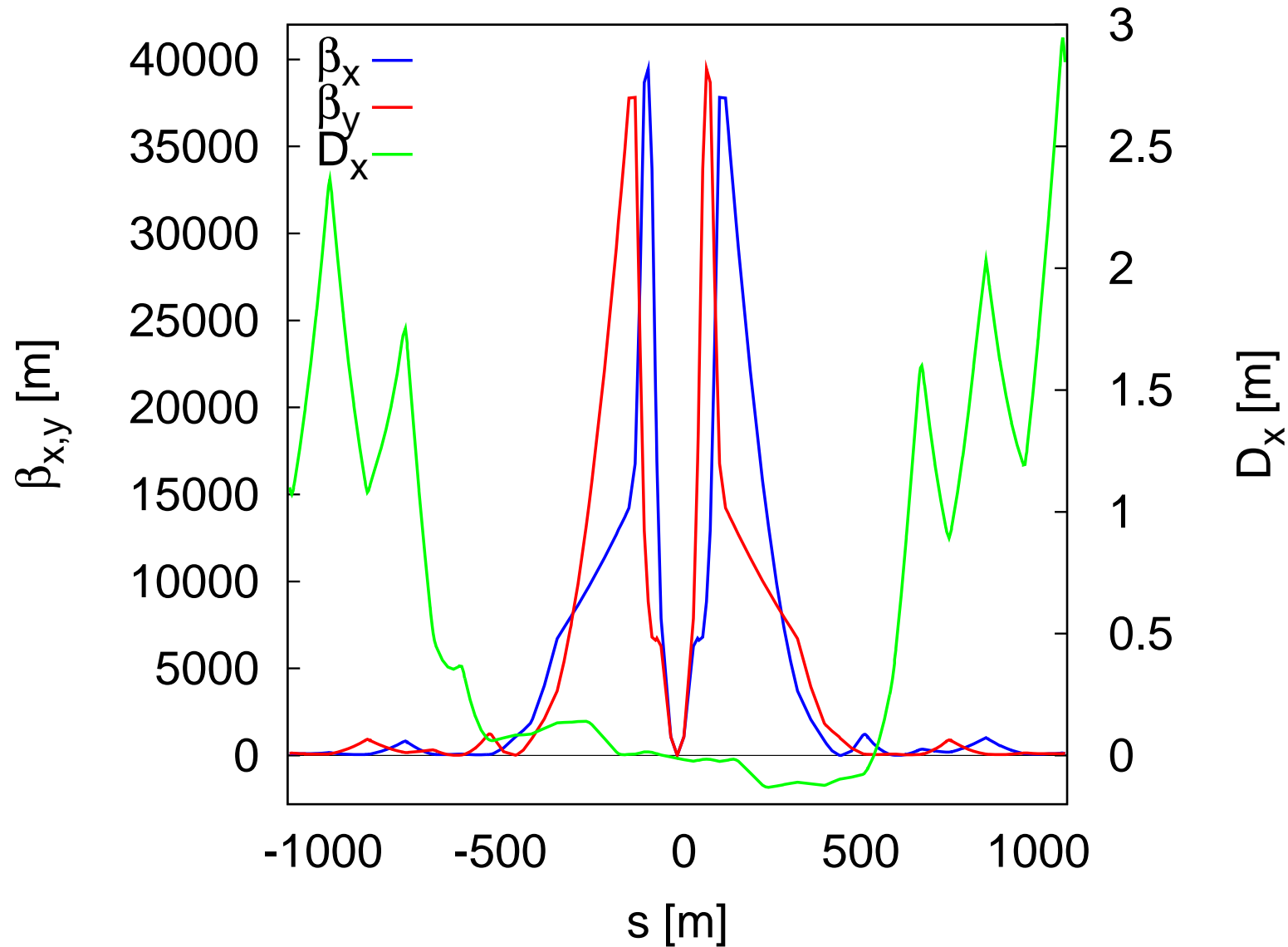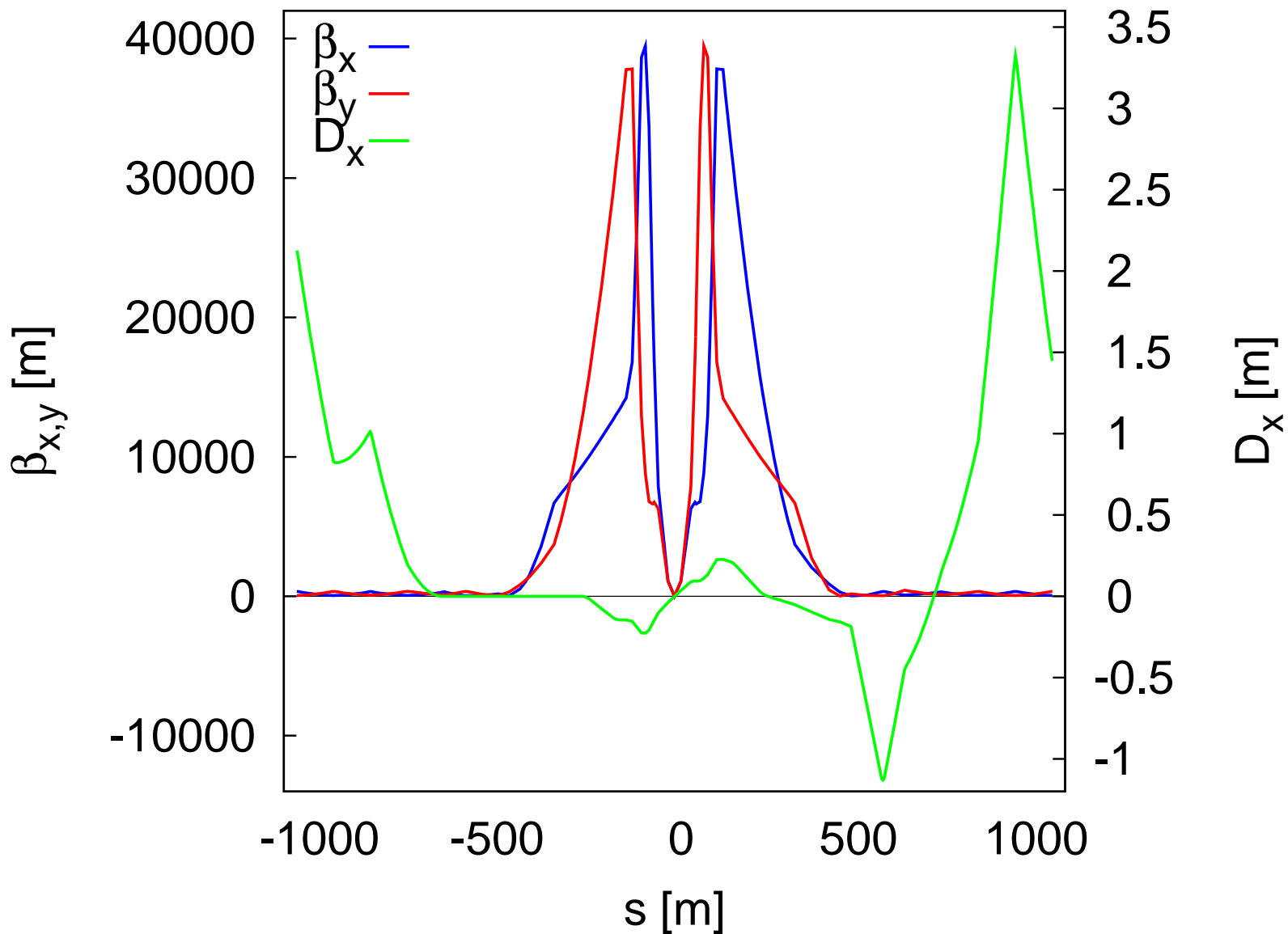FCC-hh IR with half bend DS matched to current arc lattice

Bending angles in DS

	Half bend DS	LHC style DS
Total length [m]	1064	1094
Total bending angle [mrad]	15	35

Per side and per IP

What Dispersion looks like in LHC like design

... and with Textbook DS

Conclusion

- Textbook half bend DS less efficient concerning dipole 'fill factor'

- dispersion has to be anyway matched to dispersive elements in IR (separation dipoles, Kickers)

- Question: what is the preferred DS design?