Abstract：

1. **Start to end simulations for the linac new baseline and progress on the crucial components**

This talk will present the physics design , as well as the key technical system R&D based on the 20GeV S+C band linac, including but not limited to

- status of linac

- start to end simulations for the linac

- the positron source FLUX concentrator

- the progress of S-band spherical pulse compressor

- the S-band 3 meters long accelerating structure (the comparison of couplers)

- preliminary design of the C-band RF system and accelerating structures (C band RF system section, C band accelerating structure design, C band pulse compressor model selection)

- damping ring RF cavity