Input from PWG-UD

- **Goals:**
  - Test that we are able to find the UPC events in conditions with pile-up
  - Validate the analysis chain in the central barrel and muon arm
- **Three $J/\psi \rightarrow \mu^+ \mu^-$ productions with STARlight**
  - Generator already functional in O2 framework
  - Semi-forward configuration with one track in MUON other in TPC
  - Midrapidity and forward rapidity, both equally important
- **UPC productions are light, if possible, the same triplet for pp would allow us to train the diffractive analyses**

| UD | CohJpsiToMu_Cent | Pb-Pb | MB | STARlight | ITS, TPC, TOF, FV0, FDD | 1M | $|y|<0.9$ |
|----|------------------|-------|----|-----------|--------------------------|----|-----------|
| UD | CohJpsiToMu_Fw   | Pb-Pb | MB | STARlight | ITS, MFT, MUON, FV0, FDD | 1M | Forward rapidity |
| UD | CohJpsiToMu_Semi | Pb-Pb | MB | STARlight | ITS, TPC, TOF, MFT, MUON, FV0, FDD | 1M | One track forward, one track central |
Embedding the UPC events

- The UPC events needs to be distributed independently from minimum bias events
- Is there a possibility in the current embedding to inject signal in different BC than then the minimum bias event?