

# V.Kapin: Telework summary (06Jul-05Aug 2020)

0) General activity - due to telework, COVID, supplementary (not my subjects) – a lot of time!

For example, “Preventing Harassment and Discrimination: Non-Supervisors” pass test on 4-Aug

1) MADX simulations for new D-magn @extraction (PSP-meeting 30Jul – BD-8906)

Task: reproduce existing trajectories near extraction - at the last “full” turn – extrapolation B38 2Mar -data

MADX matching: VARY=Vkicks (Correctors) & CONSTRAINTS Y-BPM(meas) in L01-L04; BPMLU3 = bad!;

comparison  $I[A, \text{MADX}]$  with  $I[A, \text{ACNET}]$  at several BPMs -> **locally** perfect !, globally - wrong)

**Plans:** simulate off-axis orbits & particle losses via multi-particle tracking...

**Study:** parasitic - B38 & IPM(L4) data @“**known conditions**”

2) New Booster Collimation Unit in Long 8 (post PDR activity)

Post PDR meeting by DJ; made 0–version response; Plan: discuss with DJ => further planning (my simulations ?)

Cabling & penetrations: info to Vladimir, Salah, Rick T. (respond from VS via Mike Coburn – most cables)

3) Understanding and simulating Booster C.O. with MADX

Learning MADX abilities for CO simulations - for 3 my topics: collimators (bumps @ close turns in L06-L08);

extraction (reproduce trajectories); IPMs (L04) – verify C.O. fitting data; Study: new B38 data @“**known conds**”

4) Prepare for **study** tests on “IPM daily meas.” (by LV, B78 & ACL by B.H + B38) – wait beam

5) Simulations for RIL (discussion with Kiyomi 06/30, postponed for Aug)

6) CST based simulations for IPM to verify Shiltsev’s formulae (postponed) – after-ACL (not B78, not LabView)