



# Very brief status report of Task 17.4-related activities

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WP17 Progress Meeting 17/11/2020

# Status of simulation studies

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- **Assessment of DPA and gas production in HL-LHC collimators (by CERN)**
  - Simulation studies essentially finished
  - Aiming for a publication in a peer-reviewed journal (ideally to be submitted early next year) A. Waets, L. Skordis
- **Molecular dynamics simulations in Graphitic materials (by POLIMI)**
  - Ongoing, qualitative agreement with published results, but quantitative agreement depends on details
  - Possibility of defect aggregation under study Input from M. Beghi

# Tests @GSI & @BLIP and related studies

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- **GSI test (by CERN/GSI):** Talk of C. Accettura
  - See talk of Carlotta
  - For the moment, no new FLUKA studies done since irradiation conditions similar as for previous test
- **BLIP test (by RaDIATE Collaboration):** Input from N. Solieri,
  - CERN2 capsule with Mo-coated CfC/MoGR specimens:
    - PIE contract awarded to Framatome GmbH last year, but issues with shipment from US to Germany (new regulations for radioactive containers in place since summer): capsule finally cleared last week, ready to be shipped
    - FLUKA studies already finalized (shown in July meeting)
  - CERN3 capsule with CERN/Fermilab specimens, including the coated MoGR and Graphite R7550 samples
    - First delayed due to COVID-19, but then BNL decided to stop running with RbCl targets (Capsule irradiation would have been parasitically with isotope production)
    - Different irradiation options at BNL assessed, FLUKA studies to be redone for new set

# Deliverables & Milestones

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- **Deliverables:**

- The task has one deliverable: “Report on simulations on irradiation effects”
- Due to by the end of the year (month 44), should start writing now

- **Milestones:**

- No milestones are foreseen for Task 17.4