

•Low mass mechanics for TRACKERS

WP1, ALICE, AIDA Innova

CERN-EP-DT-EO design/CO prod/Composite lab sample/FS cooling/TFG PV Deposition /MPT micropattern

EN-MME-MA/MM tomography/material TE-VSC permeability

EPFL-CMi microfabrication, Institut Clement Ader/ UPS Toulouse- microvascular, Utrecht Uni- ITS3

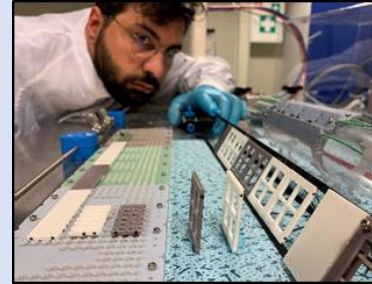
Wigner Inst – CFD analysis, St. Pietersburg Uni – gas test cooling, JINR- radiation test

DiscoEurope wafer dicing, SIRRIS laser etching, ERG/ Allcomp carbon foam

Alphacam, Xjet, IKTS Fraunhofer 3d print

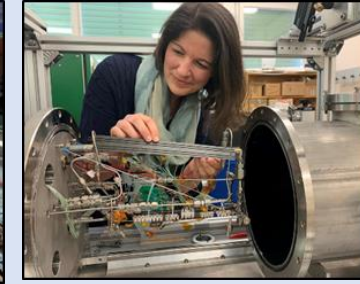
Detakta, Microlumen polyimide tubes...

Massimo Angeletti,

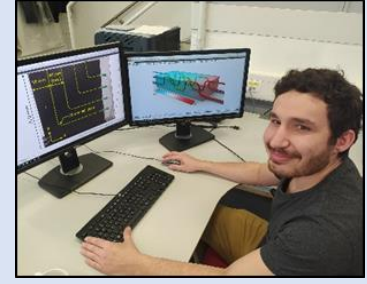


EP R&D fellow

Desiree Hellenschmidt, **Matheo** Dias



EP R&D fellow



EP R&D PhD student

•Low mass CRYOSTAT for HEP experiments

WP3, WP8;

CERN-Cryolab – pressure tests at cryo-temperature; EP-DT Composite lab, engineer assessment, EN-MME-NN – CT laminate characterization at cryo temp

Connova – Filament winding and engineering assessment; Workshape- CFRP production

Composite Technology Development (CTD)– Toughened epoxy resin systems at cryogenics

RUAG – Engineering assessment on early stage of the project in order to scale up the production

Leichtbau Zentrum Sachsen GmbH (LZS) – Functionally integrative systematic lightweight construction in multi material design.

Institute of Lightweight Engineering and Polymer Technology (ILK) of TUDresden - Mechanical characterization of material at low temperature..

Technetics – Large metallic seals ...

Maria **Soledad** Molina Gonzalez



EP R&D fellow

•Detectors' ROBOTICS interfaces

CERN-EP-DT; EO, EP-DT-DI

Petoi BITTLE – provided small quadruped robots, JJ Robot – provided blimps,

Boston Dynamics, AnyBotics – support for the use of quadruped robot in the detector cavern

University of Rome La Sapienza –robotic arm and blimps control and dynamics; University of Zurich, ETH –market survey on flying robot selection

San Jorge Tecnologicas – Collaboration for the design of a non-magnetic blimp/quadcopter

Coppelia Sim – Support for robotic simulations...

CERN-BE-CEM-MRO – collaboration under definition

Lorenzo Teofili



EP R&D fellow