

“Particle physics: from fundamental science to society”

A tribute to Gaspar Barreira

9h20 – 9h30 **Opening**

António Cruz Serra, Mário Pimenta

9h30 – 11h00 **“Physics”**

- a) The Standard Model and Beyond
Jorge Romão, Francisco Del Aguila
- b) LHC present and future
Tiziano Camporesi, Luigi Rolandi, João Varela
- c) Astroparticle challenges
Fernando Ferroni, Alessandro de Angelis
- d) Discussion

11h00 – 11h30 Coffee-break

11h30 – 13h00 **“Technology and Industry”**

- a) The digital transformation challenges - focusing on data and advanced computing
Luís Magalhães, Jorge Gomes, Jesus Marco, Ignacio Blanquer, Isabel Campos
- b) Instrumentation and detectors
Chris Fabjan, Pier Giorgio Innocenti
- c) Industry and advanced training at CERN
Paulo Gomes, Oliveira Santos
- d) Discussion

13h00 – 14h30 Lunch

14h30 – 16h15 **“Proton-therapy”**

- a) Present and future
João Seco, Frederick Bordry
Portuguese roadmap
José Marques, João Oliveira, Arlindo Oliveira, Antero Abrunhosa
- b) Discussion

16h15 – 17h00 Coffee-break and **toast** / Café e **brinde**

17h00 – 18h30 **“Gaspar vida e visão” / “Gaspar’s life and vision”**

- a) A Luta pela Liberdade e Democracia / Fight for Freedom and Democracy
Domingos Abrantes, Martins Guerreiro, Alfredo Caldeira
- b) Os anos setenta e inícios dos oitenta no Centro de Física Nuclear / The 70s and the early 80s at the Nuclear Physics Center
Conceição Abreu, Amélia Maio, Filomena Guerra
- c) A construção do LIP e da Física de Partículas em Portugal / Building LIP and Particle Physics in Portugal
Rui Marques
- d) O LIP em Braga / Bringing LIP to Braga
António Cunha
- e) No CERN e em SESAME / At CERN and SESAME
Sergio Bertolucci
Messages from Fabiola Gianotti and Rolf Heuer
- f) Ciência para todos / Science for all
Rosalía Vargas

18h30 – 19h00 – **Encerramento / Closing**

João Barreira, Manuel Heitor