

# Introduction to DRD7.1 session: Data Density

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# Themes within Data Density

## Challenges of Increasing Data Density

*Christophe FLOUZAT et al.*

*222/R-001, CERN*

10:30 - 10:35

## Prospects on the Power and readout efficiency

*Stefano Michelis*



*222/R-001, CERN*

10:35 - 10:55

## Prospects on New link technologies

*Fabrizio Palla*

*222/R-001, CERN*

10:55 - 11:15

## Prospects on High data rate ASICs

*Stefan Biereigel*



*222/R-001, CERN*

11:15 - 11:35

## Discussion about R&D for Data Density

*Dr Christophe FLOUZAT et al.*



*222/R-001, CERN*

11:35 - 12:00

Possibility to advertise  
your R&D project here

# Identified R&D Themes

- Power
  - High conversion factor DC-DC converters
  - Small form-factor power modules
  - Optical and wireless power transfer
- Links
  - Low-power, low-mass wireline and wireless link technologies
  - Silicon photonics
  - Compatibility with industrial standards and FPGA receivers
  - Co-packaging of electronics and optics through multi-chip-assemblies
- ASICS
  - Radiation-tolerant high-speed communication circuit blocks
  - Data encoding
- Several R&D themes need common efforts with other DRD7 teams



*Stefano*

*Fabrizio*

*Stefan*