MICELEC Activities Summary

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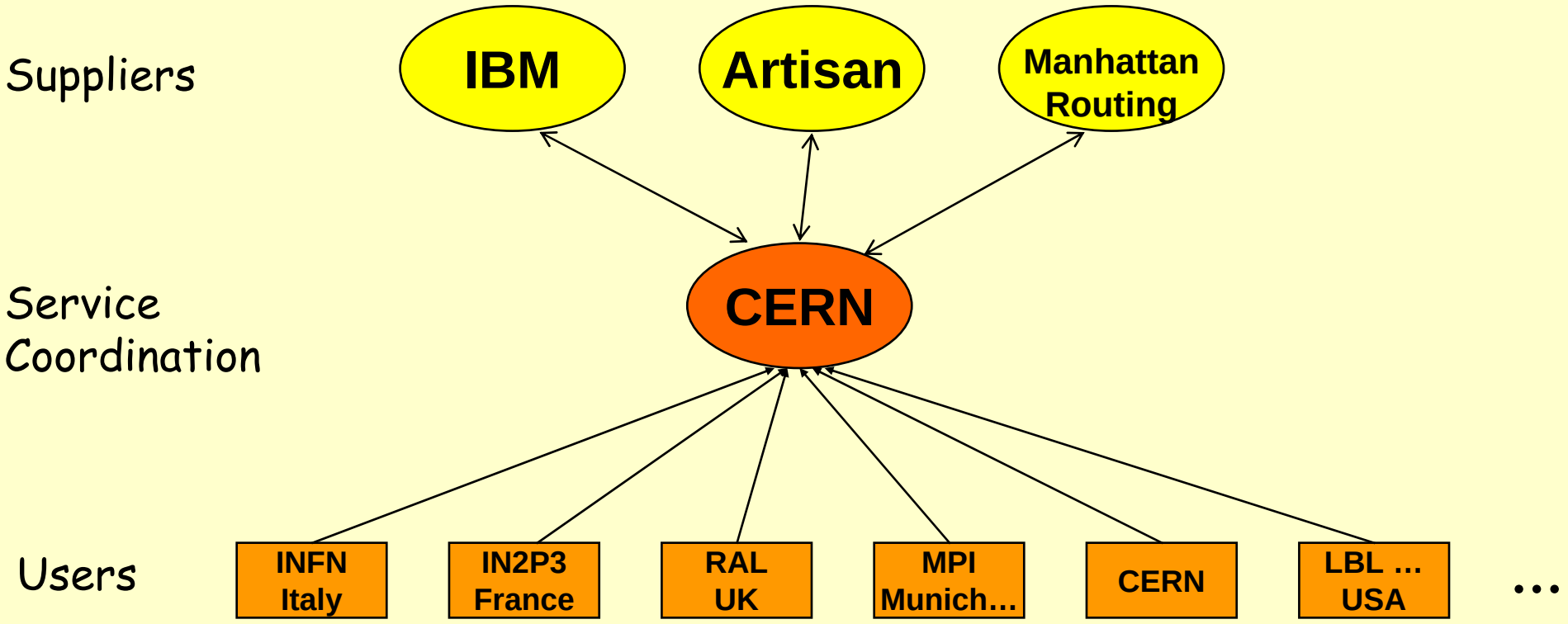
Overview

- Services for microelectronic design in the HEP community
  - Distribution Model
  - Components to facilitate ASIC design
- How was the EUDET contribution spent

Organizational model



Components

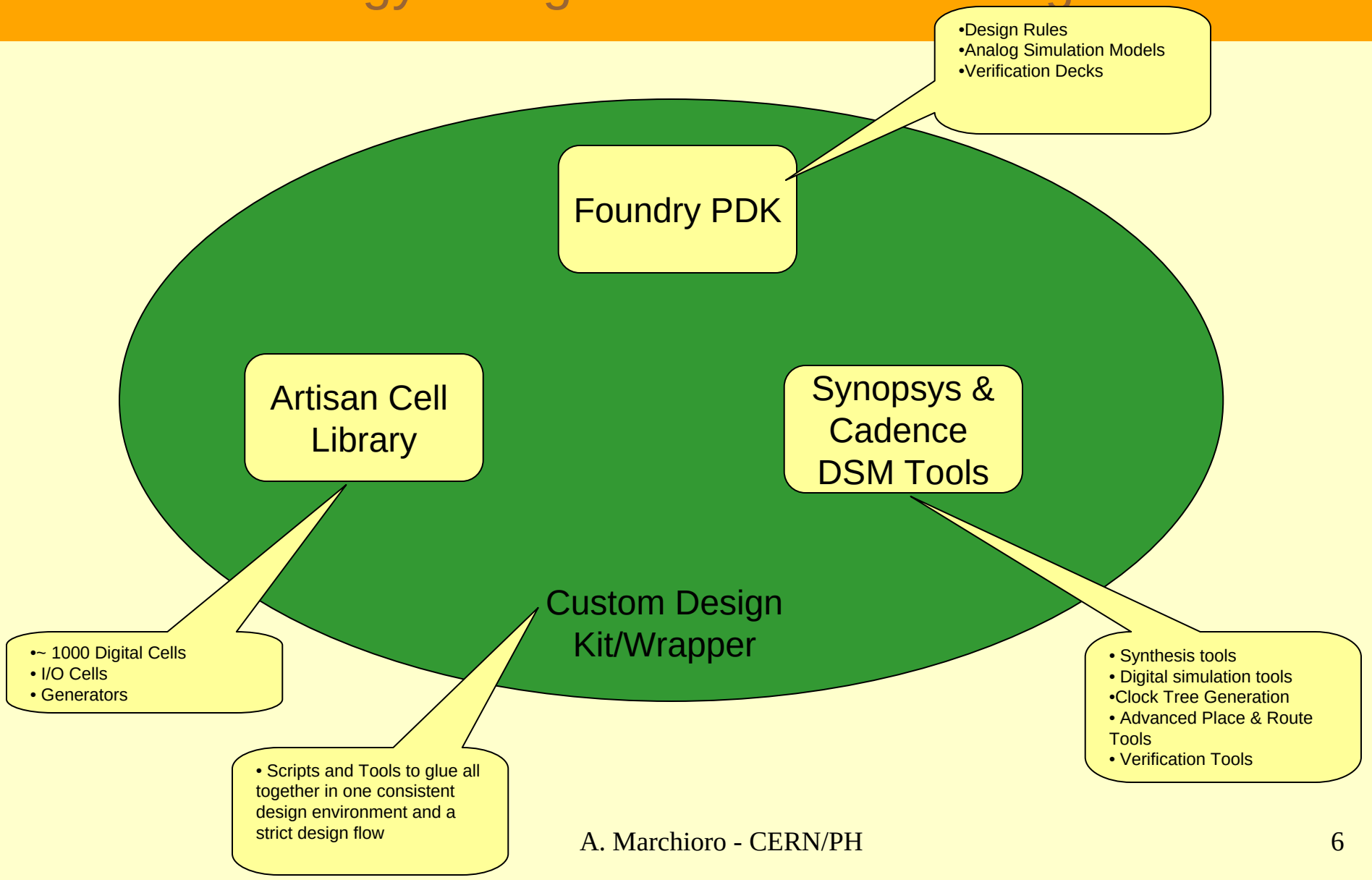
- Technology
- Design Assistance Package
- Design Services
- Prototyping and Production Services

Technology

- Contract negotiation for entire (interested) HEP community

- For the SLHC and ILC Generation
  - IBM 130 nm CMOS, 90 nm later
  - IBM 130 nm BiCMOS

Technology Design Assistance Package



Design Services

- Availability of tools and specific training for entire community
- Uniform and synchronized set of libraries, design methodology, tools for community simplifies participation to projects and exchange of expertise
- Assistance for design verification prior to submission (DRC and LVS), cell replacement
- Negotiation with foundry if special "rule violation" are required

Prototyping and Production Services

- Depending on further funding approval, 2 MPW/year might become available from 2007 in 130 nm at reduced price
- Organization of shared proto/prod runs among different labs/projects
- Interface to foundry for production issues or special requests (non-standard options, lot splits, etc.)

EUDET contribution

- Eudet contribution (complemented with CERN funds) has been spent mainly to purchase the design "wrapper" to complete the digital design package
  - Special conditions negotiated for HEP Institutes with Artisan—ARM and with Manhattan Routing
    - » CERN pays "master license" covering major support expenses
    - » Institutes pay (much) smaller annual maintenance fee
    - » Technical support provided to designers in external Institutes through CERN engineers