

DE LA RECHERCHE À L'INDUSTRIE

cea



# Conceptual Design Review of R2D2 6 - Conclusion -

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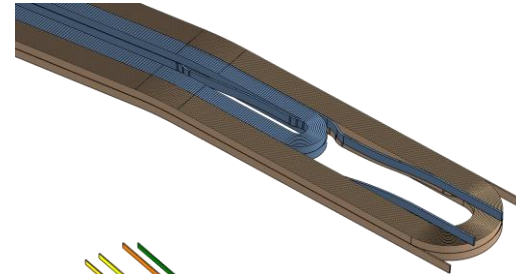
**CEA:** E. Rochepault, V. Calvelli, M. Durante, H. Felice,  
P. Mallon, P. Manil, G. Minier, G. Maitre, B. Prevet, S.  
Perraud, F. Rondeaux

**CERN:** S. Izquierdo Bermudez, J.C. Perez, D.  
Tommasini, J. Fleiter, H. Felice

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1. Ultimate goals of the development plan : **F2D2 16 T short model**

- Requires **grading** → choice of **external splices**
- Option for internal splices open



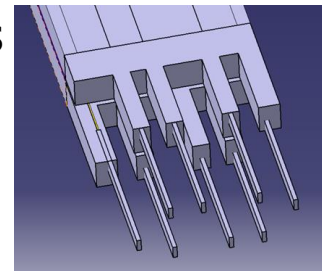
2. Demonstrate feasibility of external splices on **R2D2**:

- **a 12 T simplified magnet**
- **Racetracks** to simplify coil fabrication and assembly
- **Single layer coils** to reduce the use of conductor and risk
- Fast turn-over **mockups** + full size **Cu coil**



3. But, additional complexities due to racetracks:

- **Difficult protection** due to high current/energy densities
- **Long spacers** to extract leads + reduce field in the ends
- **Difficult access** for longitudinal pre-load



4. **R2D2 optimized for safety margins, not performance**