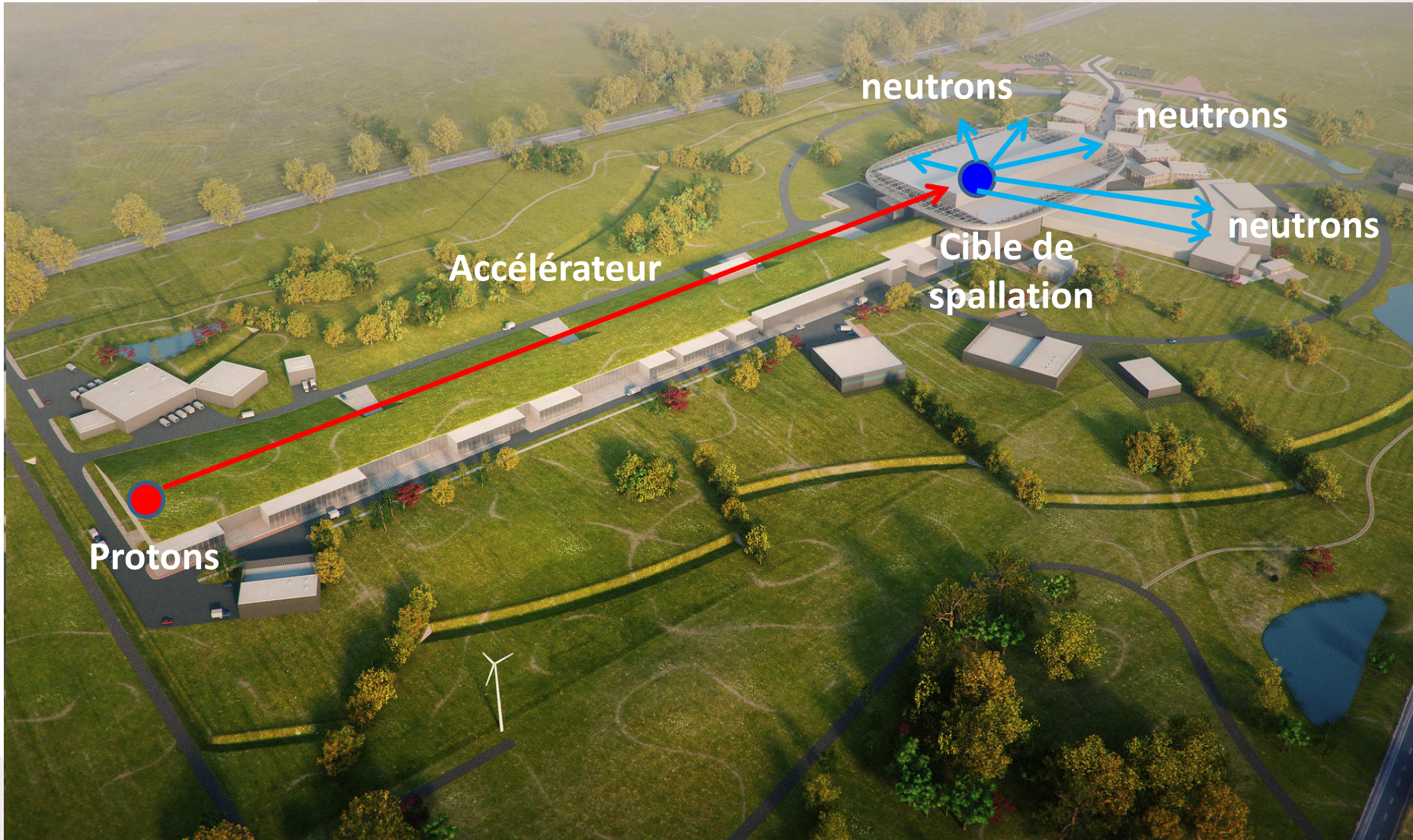
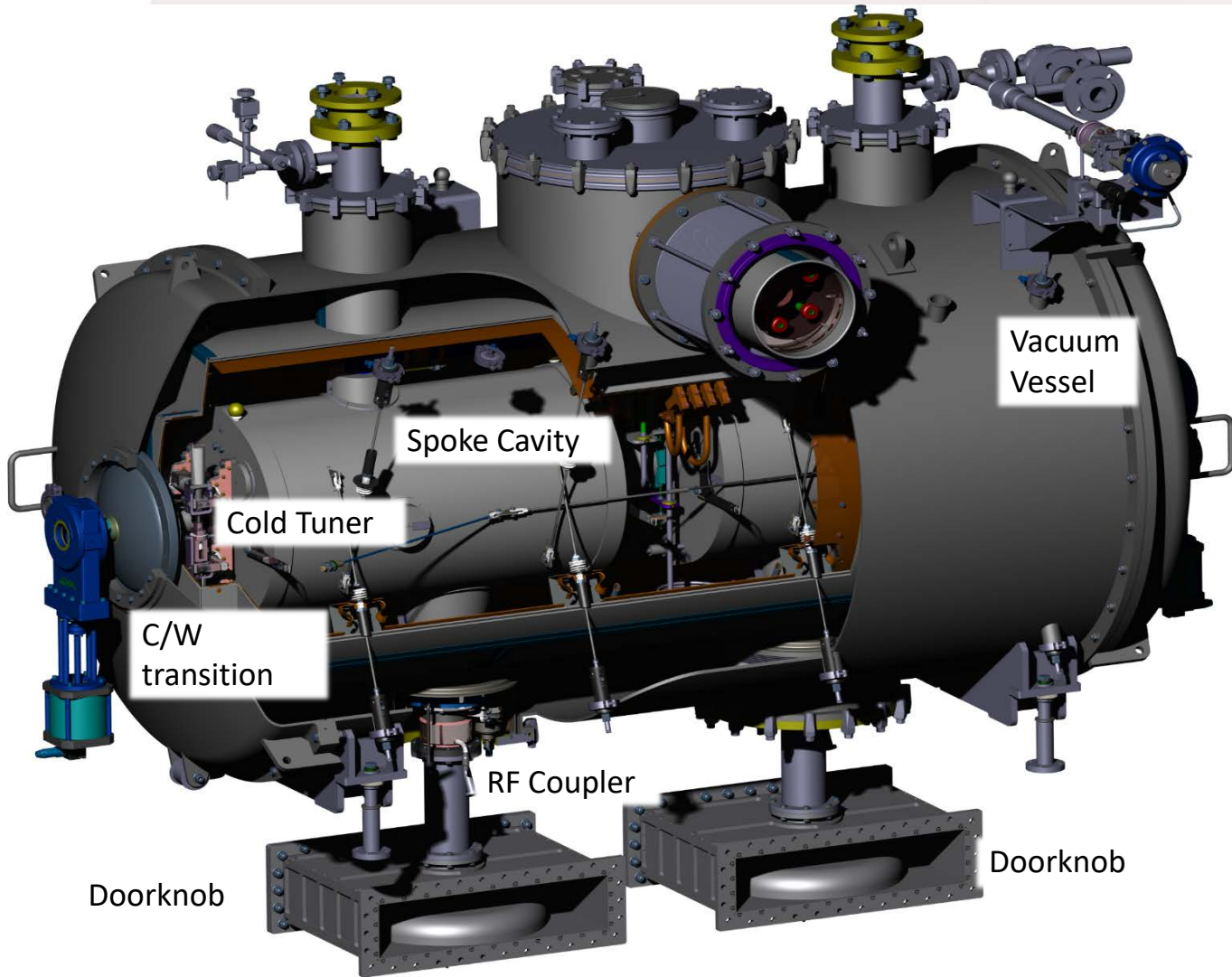


Spoke Cryomodule Documentation



Cryomodule main components



For each component, IJC Lab will provide to ESS

❑ **Design Folder**

- Calculation
- Drawings
- Identification procedure
- Technical specifications
- *CM Instrumentation (sensors and actuators)*
 - ✓ Piping and Instrumentation diagram (PID)
 - ✓ Localization of T° sensor on equipment (drawing or procedure)
 - ✓ Description of cables

❑ **Manufacturing Folder**

- Drawings
- Test Procedures
- Passivation Procedures (equipped vacuum vessel, double wall tube)
- "As built" CAD models
- Welding plans (included qualification)

Manufacturing Tests Folder

- Dimensional controls
- Pressure tests
- Leak tests
- Passivation reports (equipped vacuum vessel, double wall tube)
- Certification of conformity according to the CCTP (Technical specifications)
- List of manufacturing and control operations

IJC Lab Tests reports

- List of components
- individual qualification tests (cavities, couplers and tuners)
- *CM Instrumentation (sensors and actuators)*
 - ✓ Instrumentation tests reports
 - ✓ Cernox calibration points and fits

Cryomodule user manual (Training and Operations)