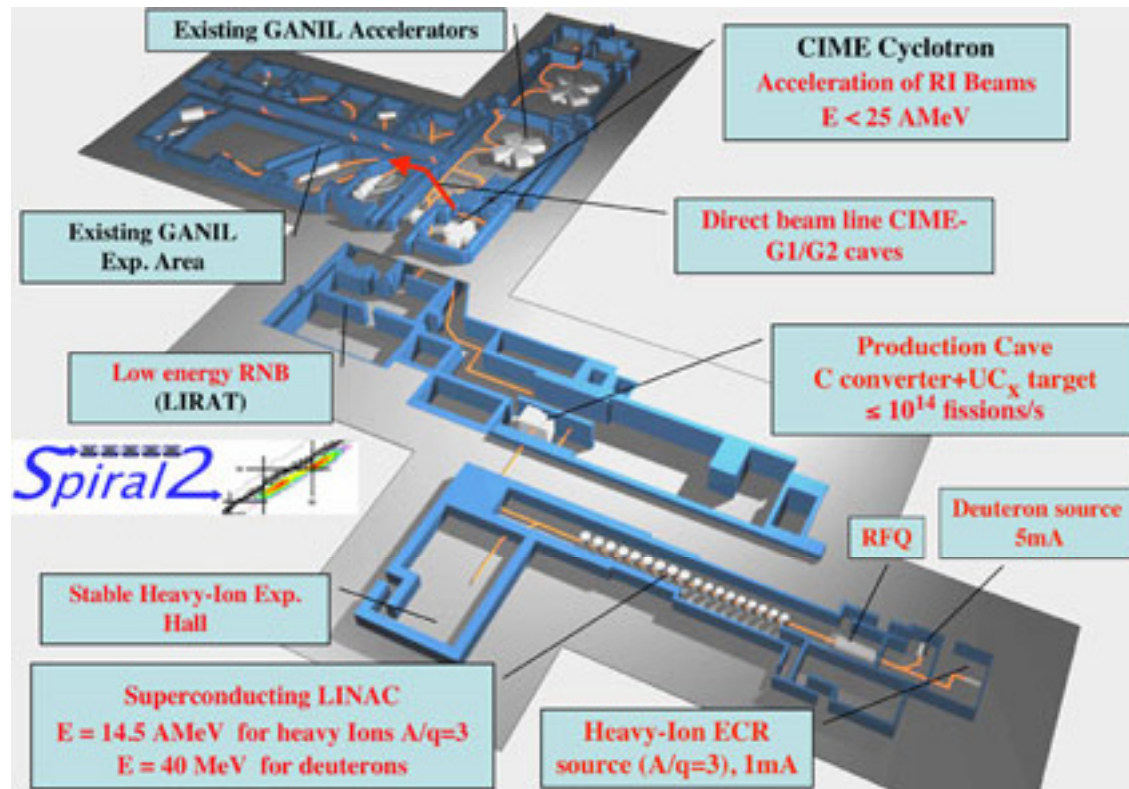


LAST SPIRAL2 10 kW CW RF COUPLER DESIGN

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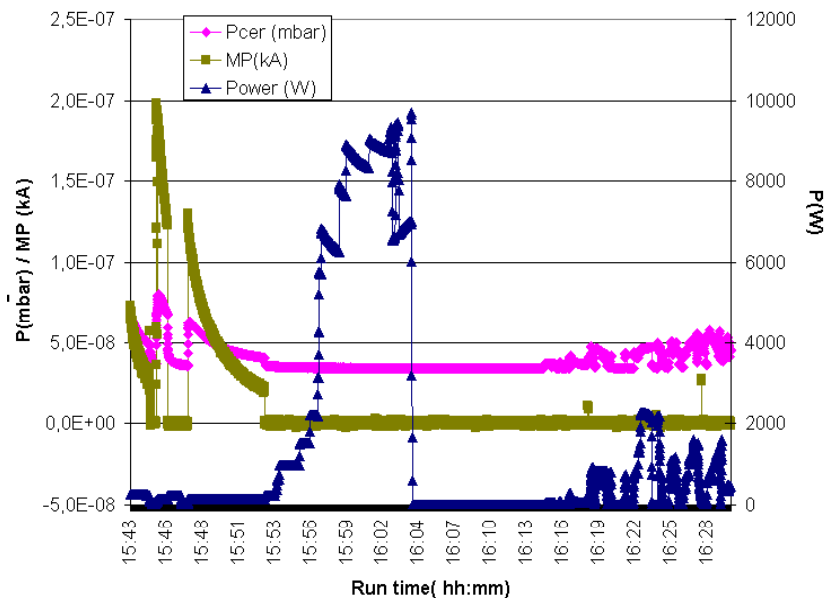




Tests of the coupler in the cryomodules



Prototype



First RF conditioning at 4.2K

Y. GOMEZ (LPSC) LINAC08 02 September 2008

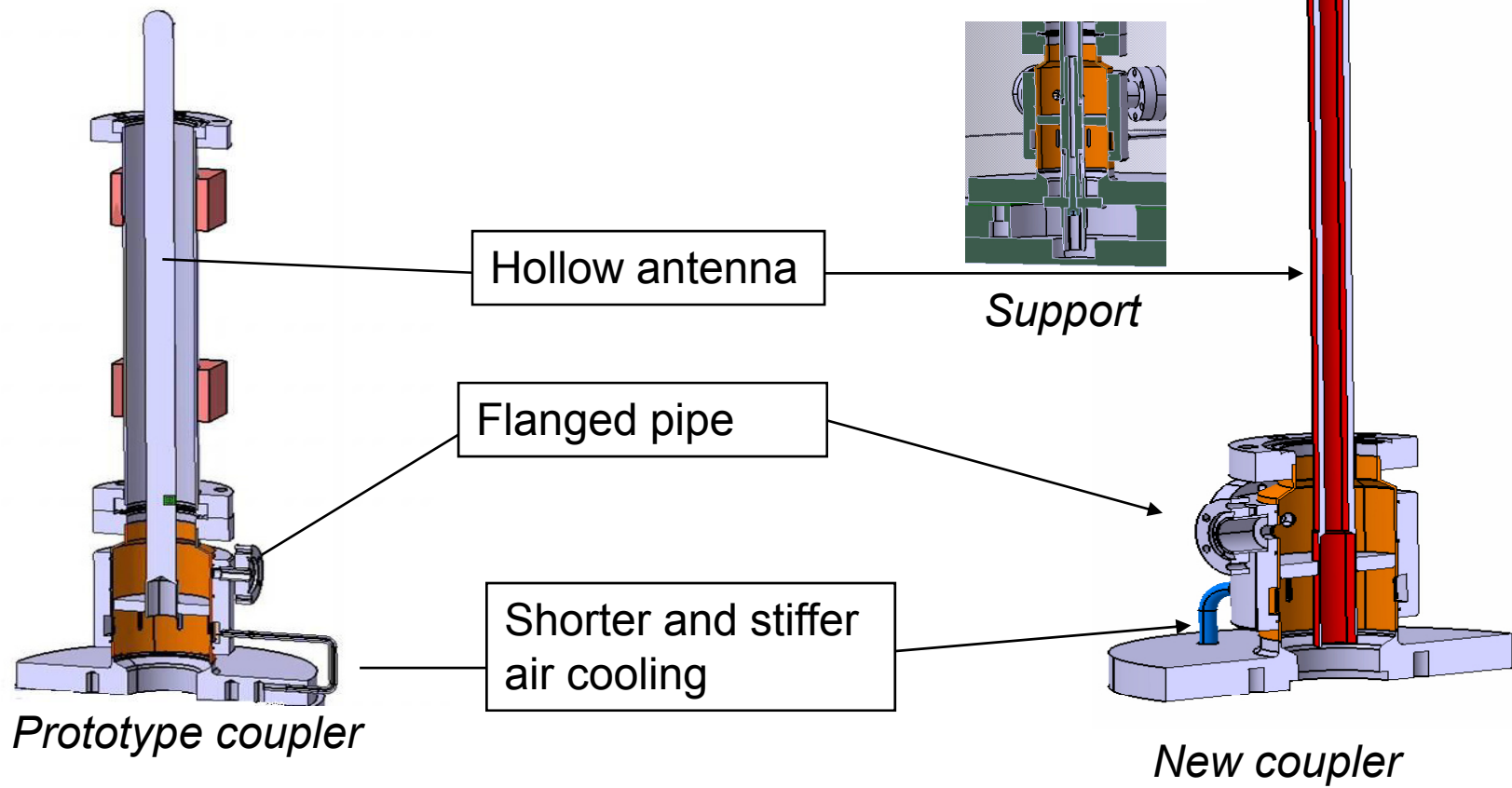
*The protocol of preparation
of the coupler was
validated*

*The RF design was
validated*

Main design changes

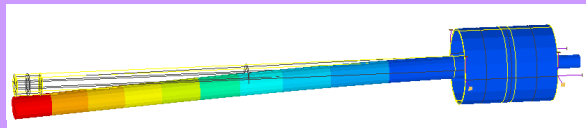
Weakness in the transport led to an updated mechanical design

More robust coupler was made

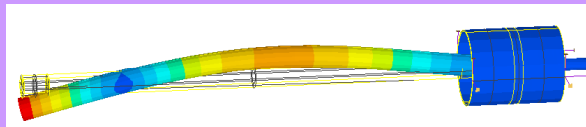


- RF
 - THERMICAL
 - MECHANICAL
- # Updated simulation

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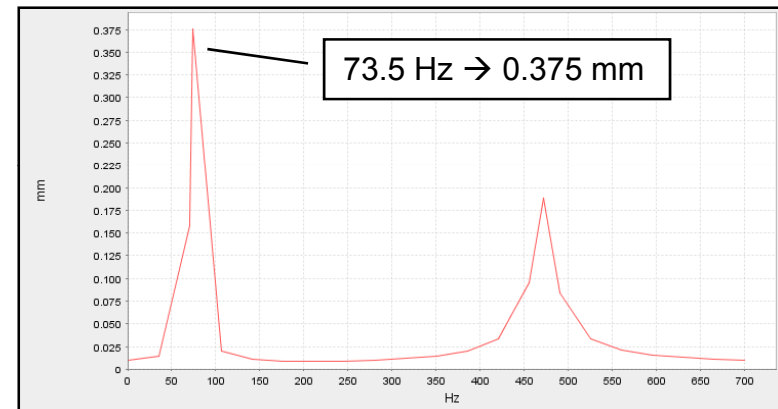


Mode 1 and 2. $f_r = 73.5\text{Hz}$



Mode 3 and 4. $f_r = 467.7\text{Hz}$

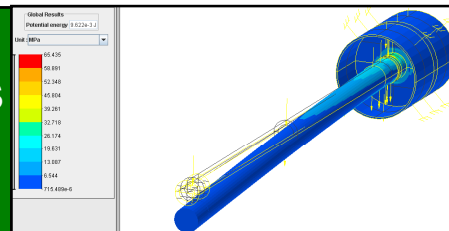
H
a
r
m
o
n
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c



0.375mm → 33MPa
<Endurance stress limit

Transport

Maximum acceptable acceleration is 10 g to avoid any lamination.



*Simulations
show the
improvement
of the new
design*