

# Entwicklung Supraleitender CH-Kavitäten

The background image shows a close-up of a complex superconducting cavity structure. It features several cylindrical components, likely niobium, arranged in a series. A prominent copper flange with four screws is visible on the left side. The components are interconnected, forming a series of nested or aligned cylindrical sections. The lighting is bright, highlighting the metallic surfaces and the precision engineering of the parts.

HOLGER PODLECH

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# CH-Entwicklung: GSI-cw-Linac

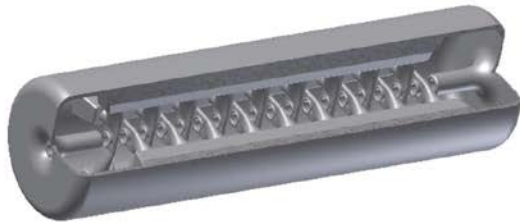
Optimierung der FAIR Injektoren

360 MHz

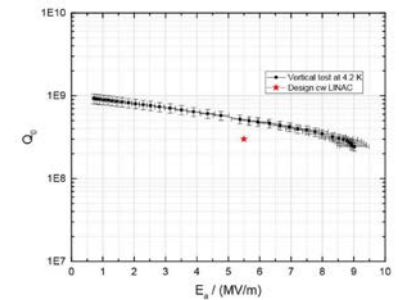
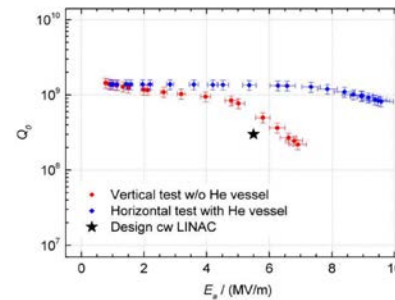
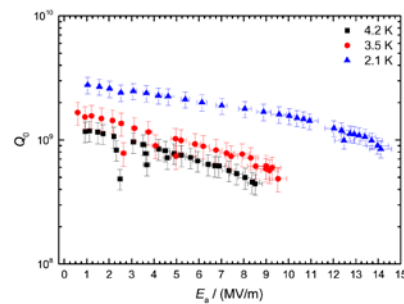
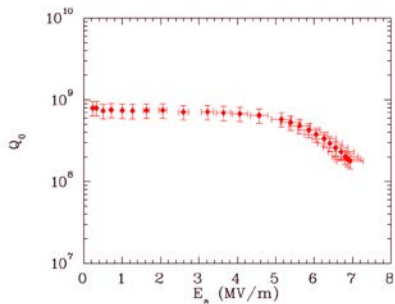
325 MHz

217 MHz

217 MHz



Erste Kavitäten für GSI cw Linac





# CH-Entwicklung: GSI-cw-Linac

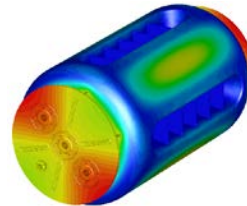
Optimierung der FAIR Injektoren

Auslegung der sl CH-Kavitäten für den cw-Linac

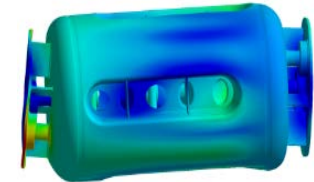
## HF Simulationen:

Frequenz  
Feldverteilung  
Peakfelder  
Tuning  
HF Kopplung

## Mechanische Simulationen Drucksensitivität



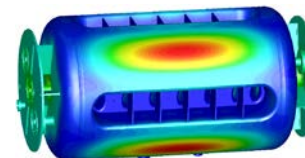
## Struktur-Mechanische Simulationen Vibrationsmoden



## Vielteilchen-Simulationen Multi-Pacting



## HF-Mechanische Simulationen Lorentz-Force Detuning





# CH-Entwicklung: GSI-cw-Linac

Optimierung der FAIR Injektoren

Test und Charakterisierung der sl CH-Kavitäten am IAP

