

# MICE: Moving Forward

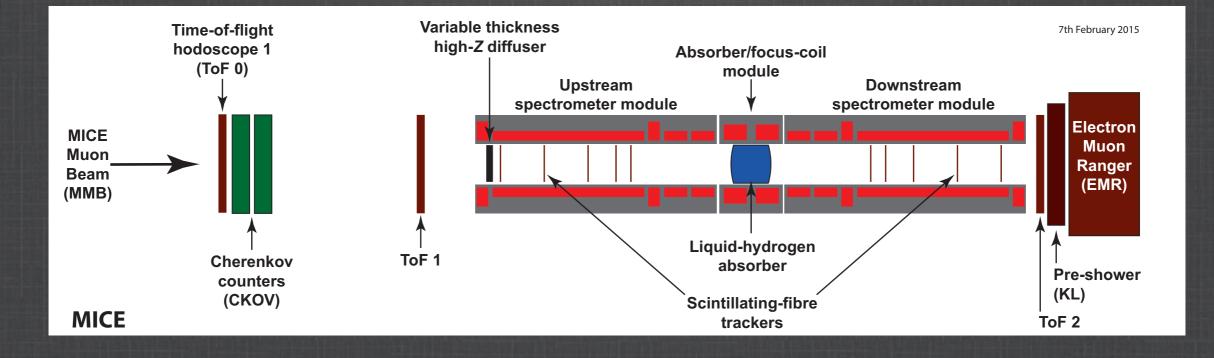
JB. Lagrange, A. Bross, D. Kaplan

on behalf of the MICE collaboration

1

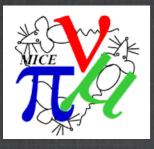


## Step IV

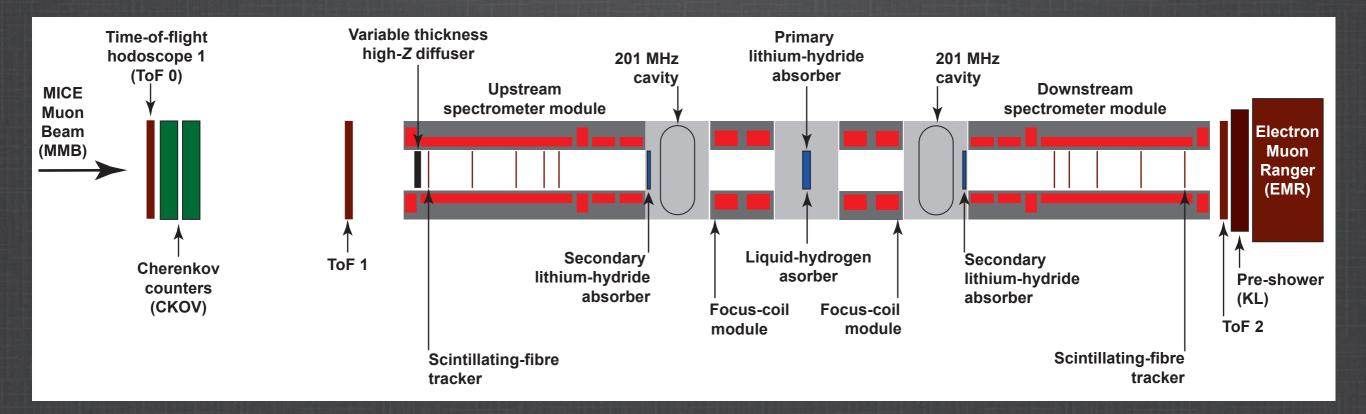


2

#### Commissioning this summer.



### Demonstration of Ionization cooling (DEMO)

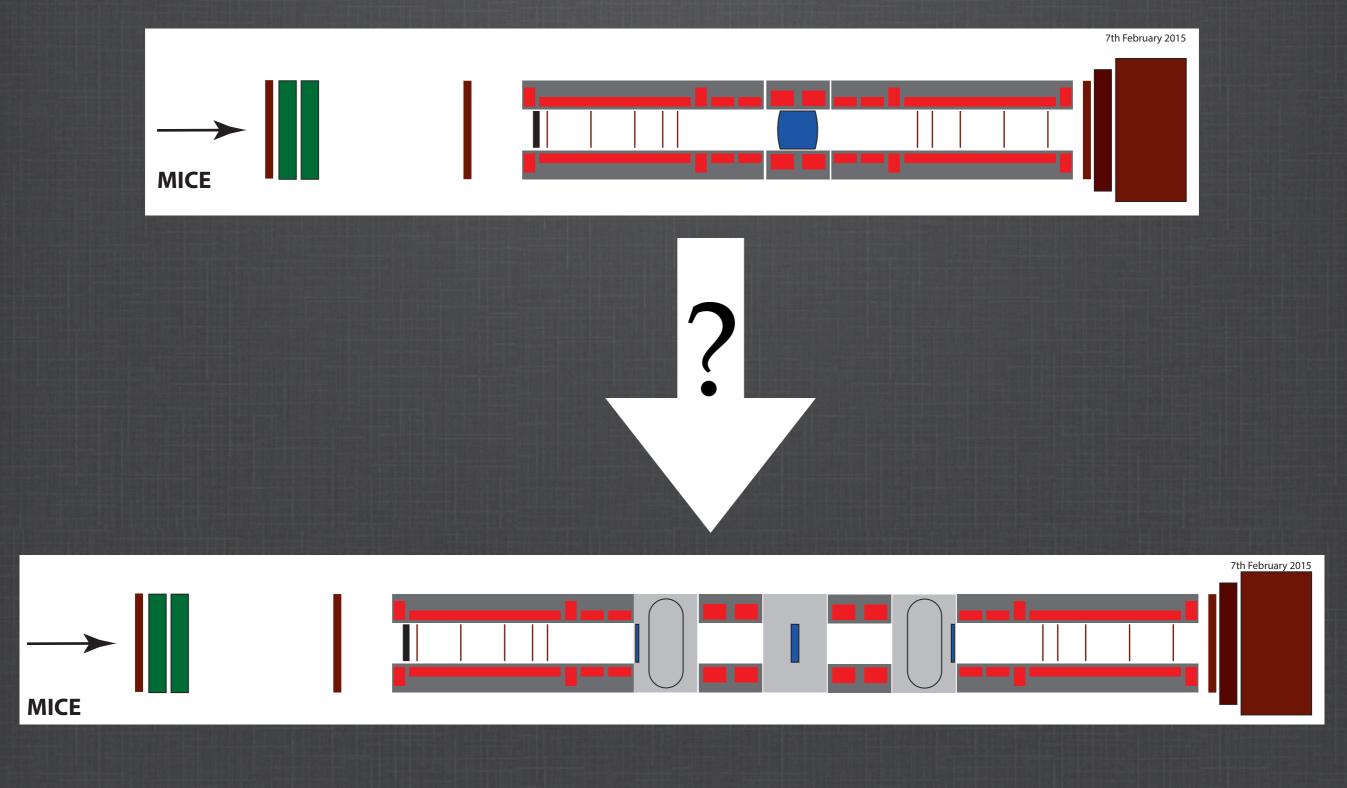


3

#### Delivery in 2017.



### From Step IV to DEMO



JB Lagrange - MAP meeting - May 2015

4



5

### Lattice design

#### Absorbers

### Second RF Module

### PRY extension



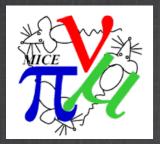
6





### Second RF Module

#### PRY extension



## Lattice design

7

Lattice almost frozen.

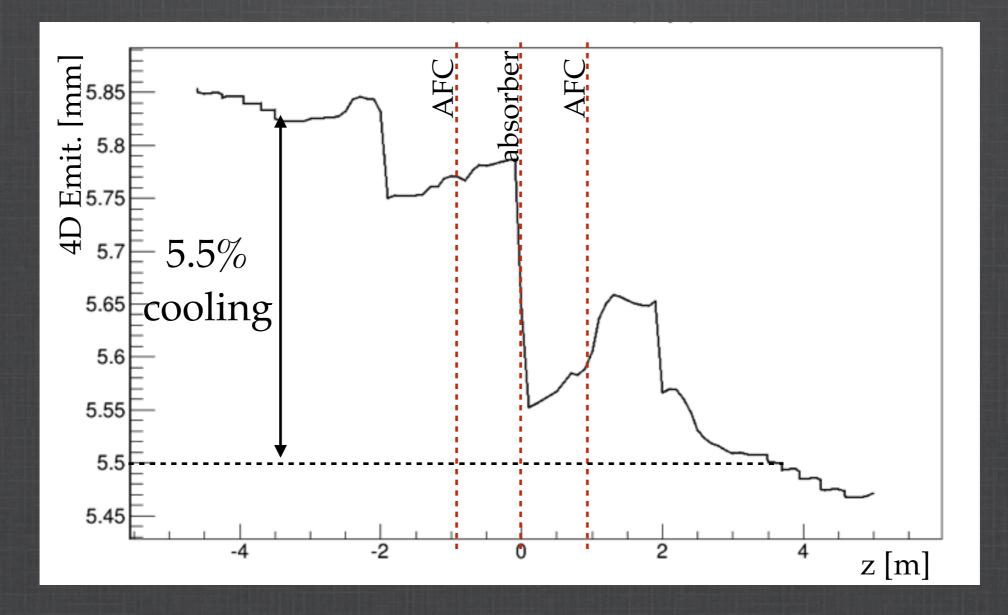
• 5.5% cooling performance.

Final optimization under way.

Paper to be submitted soon.



### Lattice performance 4D emittance



8

(J. Lagrange's talk)



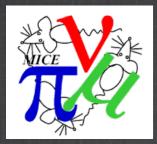
9

### 



### Second RF Module

### PRY extension



### Absorbers

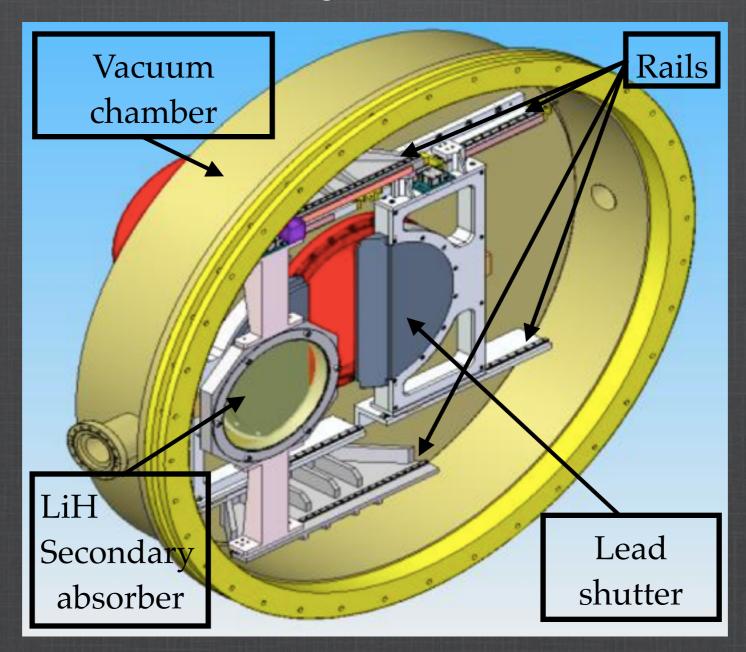
10

#### Primary absorber: LiH (thickness 65 mm).

#### Secondary absorbers: <u>LiH (\$140K)</u> or plastic.



### Radiation shutter Secondary LiH absorber



11

#### (J. Lagrange's talk)



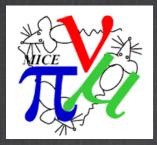
12

### 





### PRY extension



### RF Module

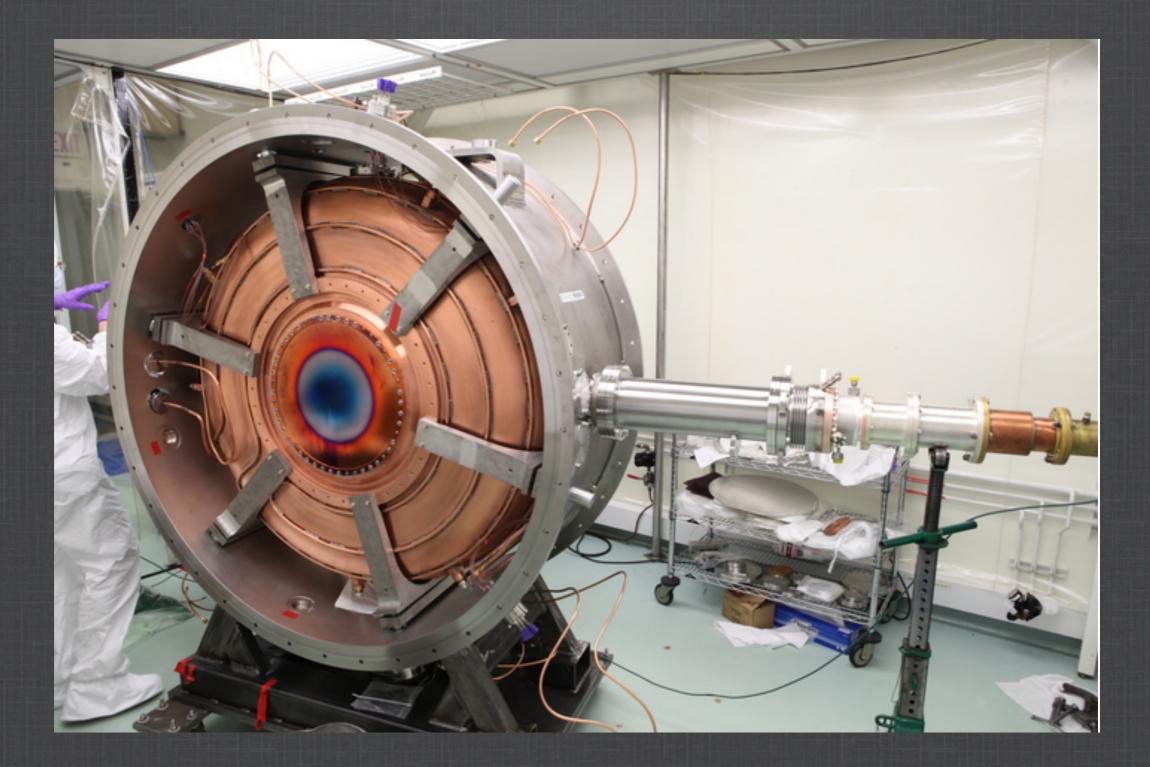
### 

Gradient of 10.3 MV/m confirmed (held at 13.5 MV/m).

Final design well advanced.

#### (M. Leonova's talk)

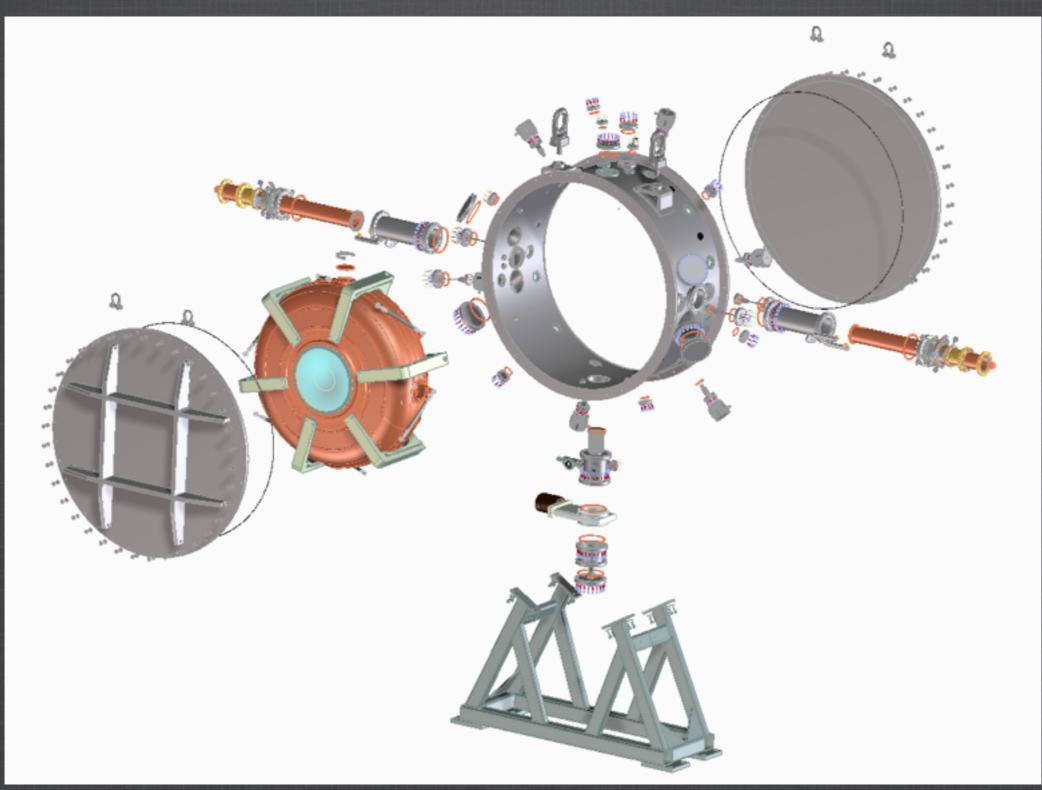
### RF Module



14

#### (Y. Torun's talk)

### RF Module



#### (D. Lee's talk)



16

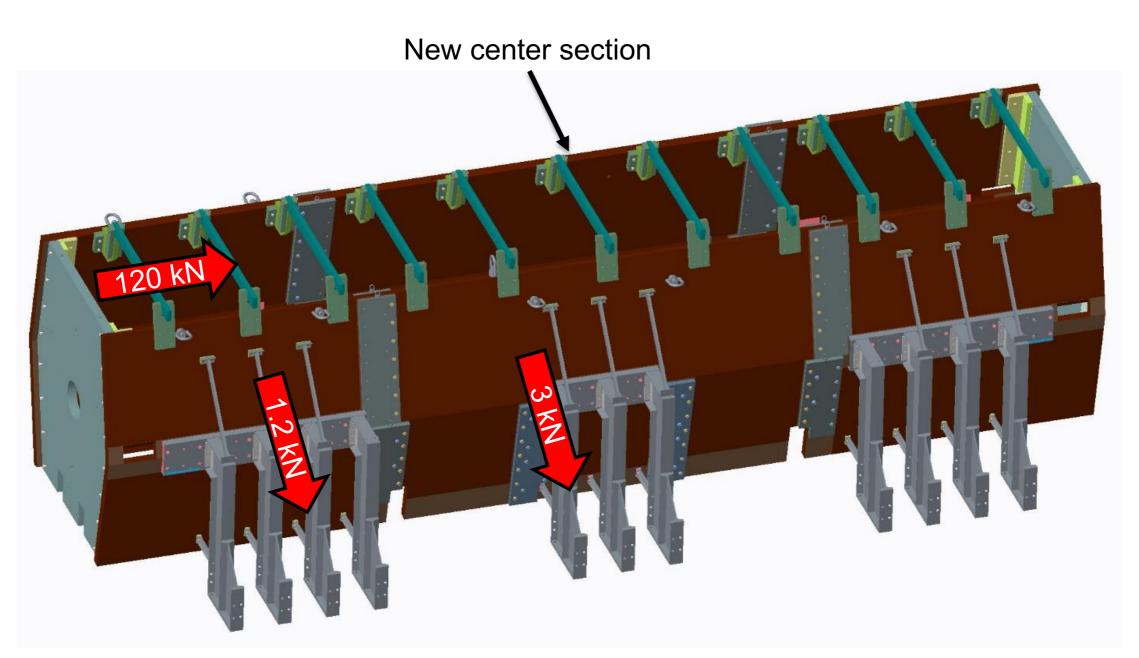
### 

#### Absorbers

### **©** RF Module

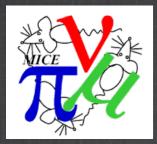


### PRY extension



Aim: drawings complete by beginning of June

#### (H. Witte's talk)



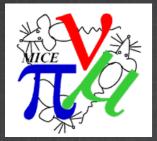


#### A lot of progress achieved.

#### Some work remains to be done in the next months.

18

Schedule is on track for a delivery in 2017.



### Thank you for your attention

19