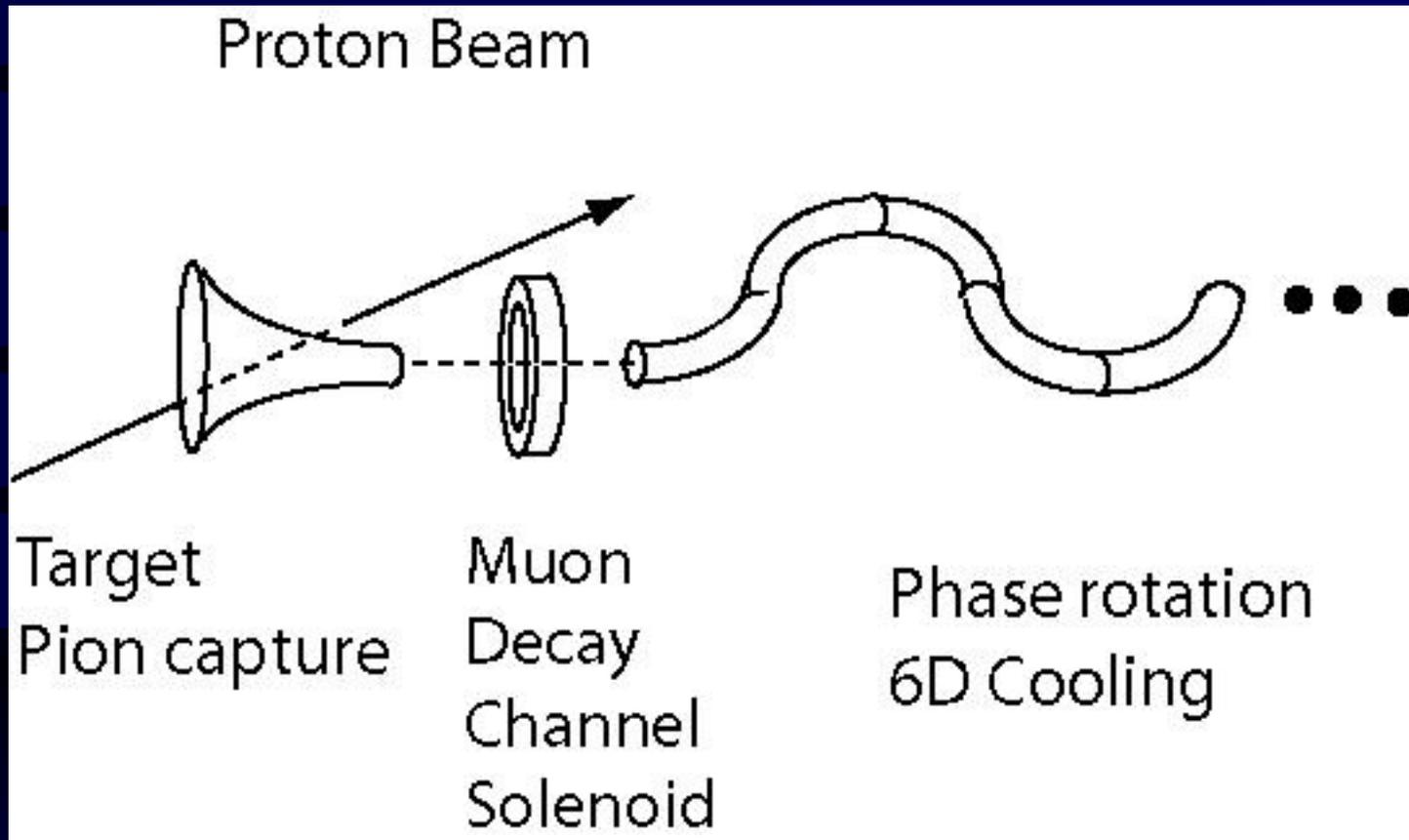


# Single path Lithium lens Channel

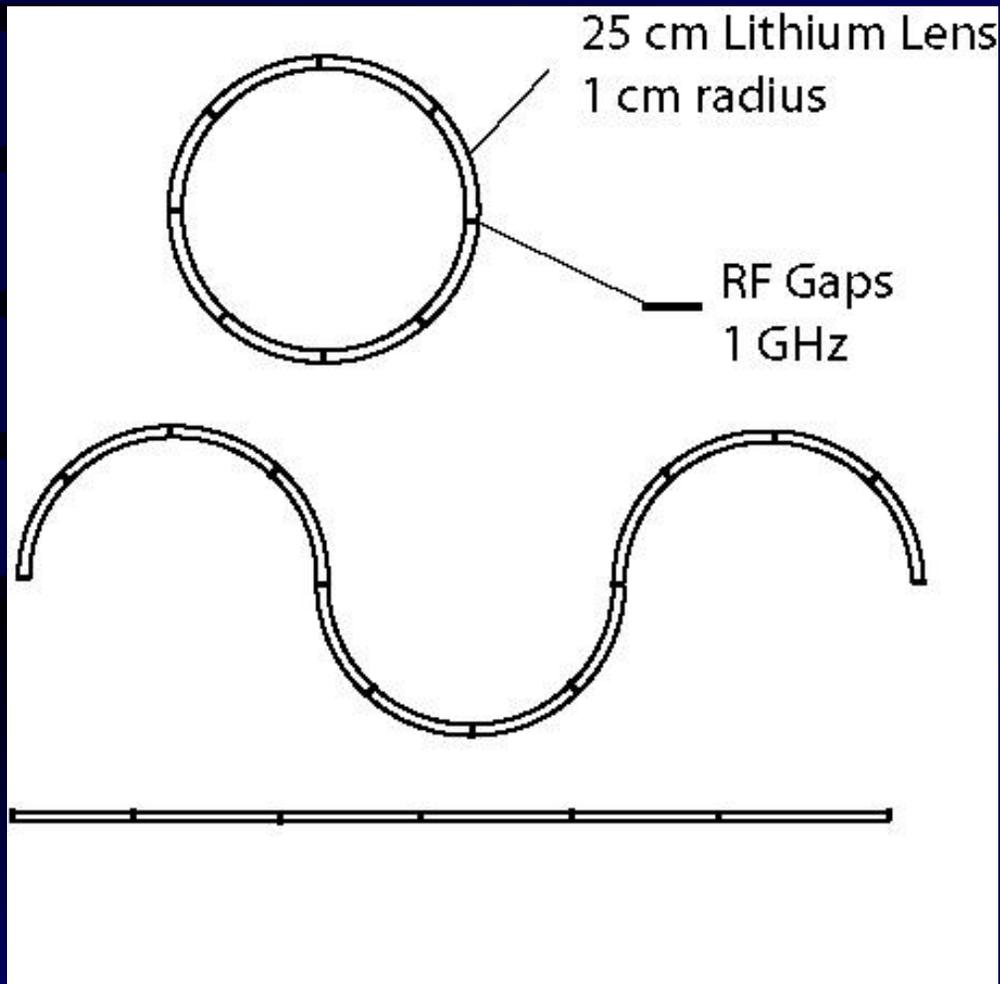
Yasuo Fukui

- Develop a single path, curved Lithium lens channel model, for  
Phase rotation and  
6D Cooling with Emittance Exchange.
- Compare cooling performance of  
Single path curved Lithium lens,  
Curved Lithium lens Ring, and  
Straight Lithium lens channel.

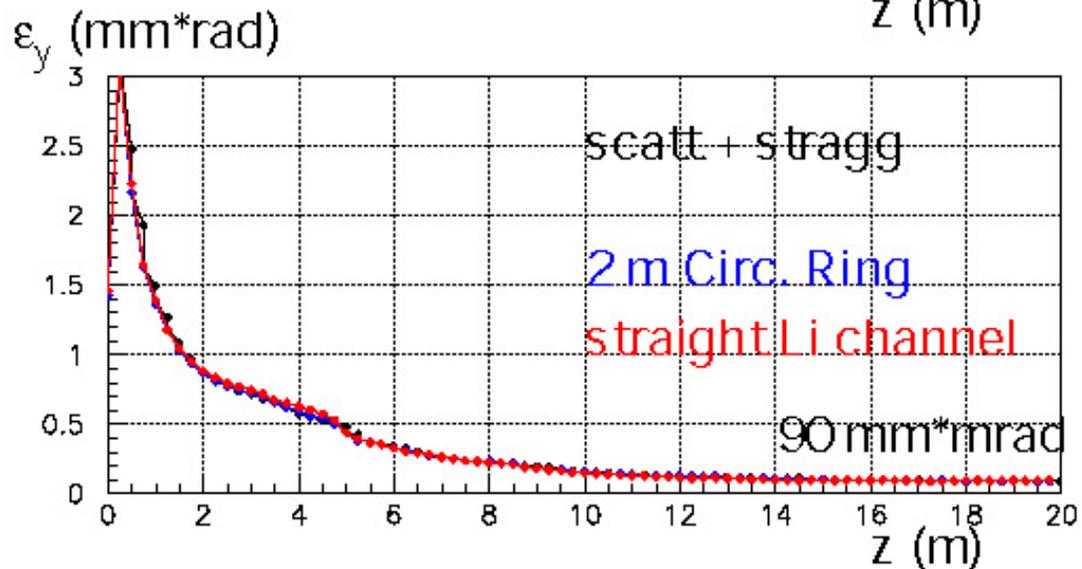
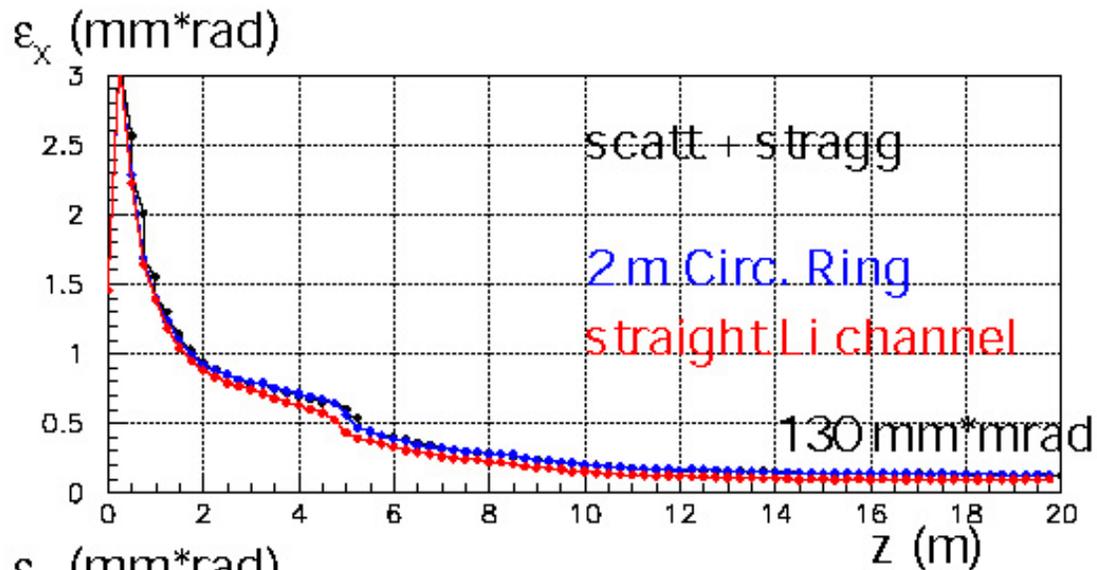
# Schematic Diagram



# Lithium lens Channels

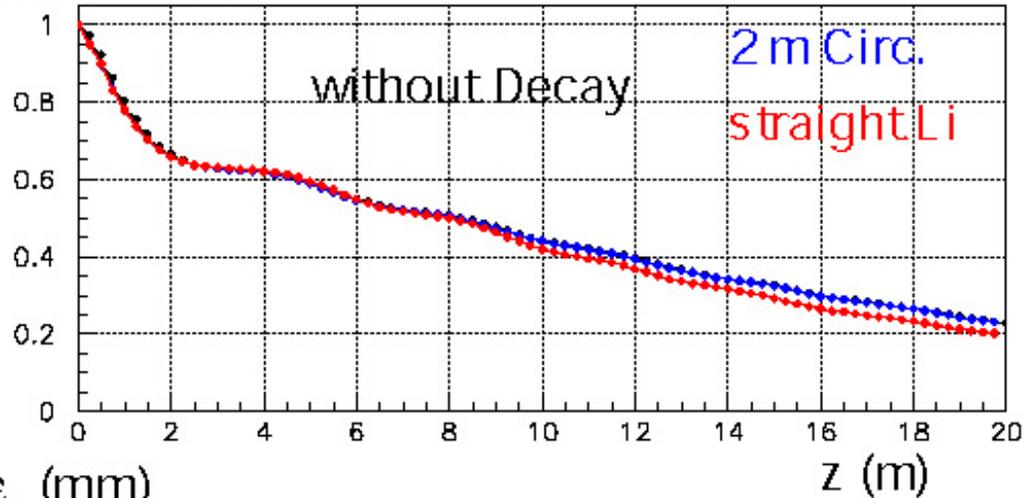


# Transverse Emittance

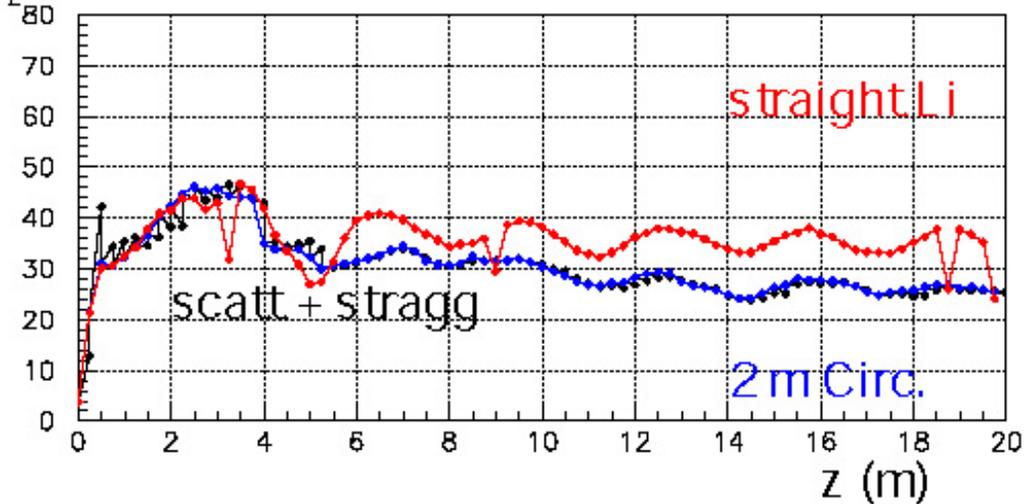


# Transmission/Longitudinal Emittance

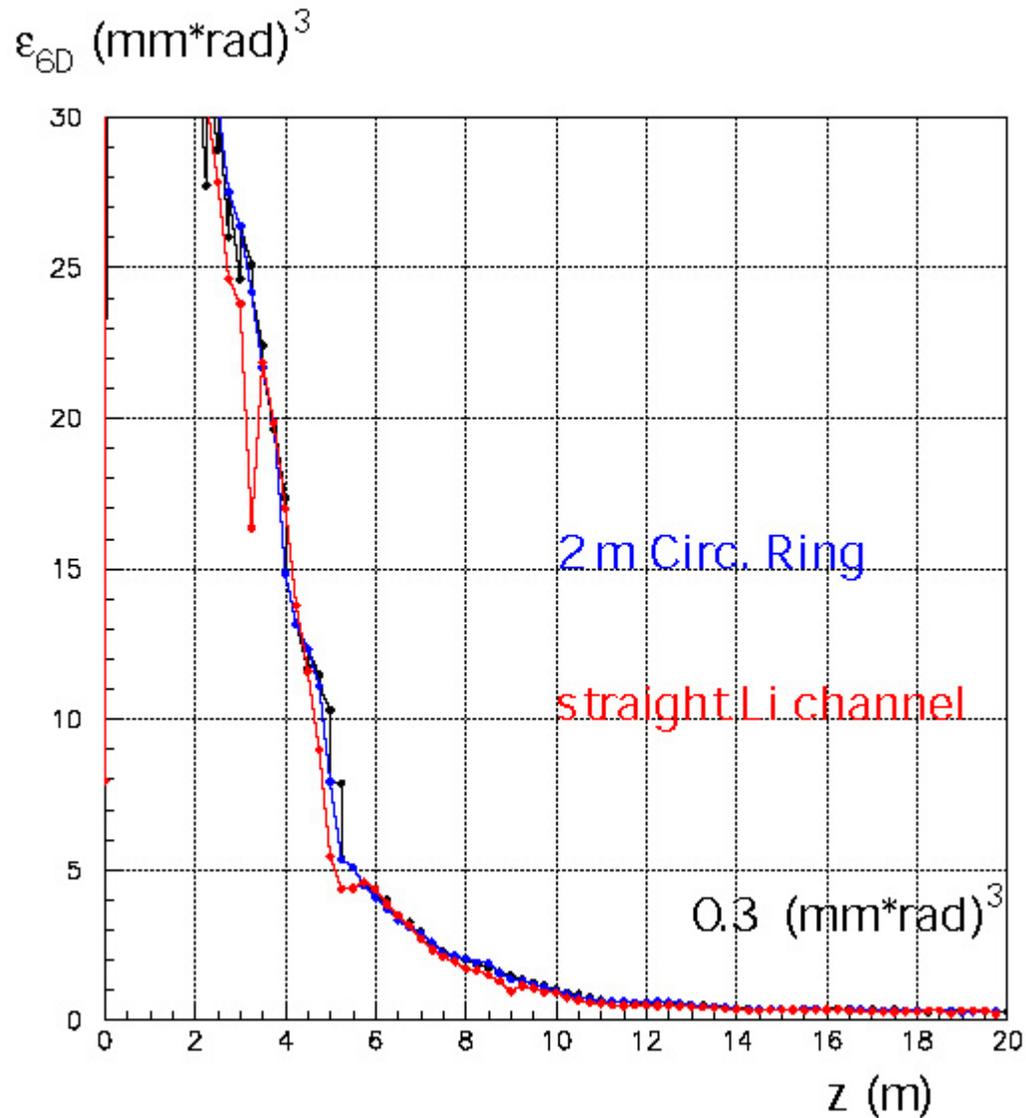
Transmission



$\epsilon_z$  (mm)



# 6D Cooling



# Summary

- ❑ Cooling performance of a Ring and a Single-path Channel with curved Li lenses are almost the same. Both is different from the cooling performance of the Straight Li channel.
- ❑ Improve 6D cooling.
- ❑ Simulate target/pion capture, and muon decay channel.