

WG6 S'Cool

# AIMS

- To bring physical simulations of aspects of particle physics into the classroom
- To be affordable for the majority of schools
- To provide explanations and documentation on the limitations of the models





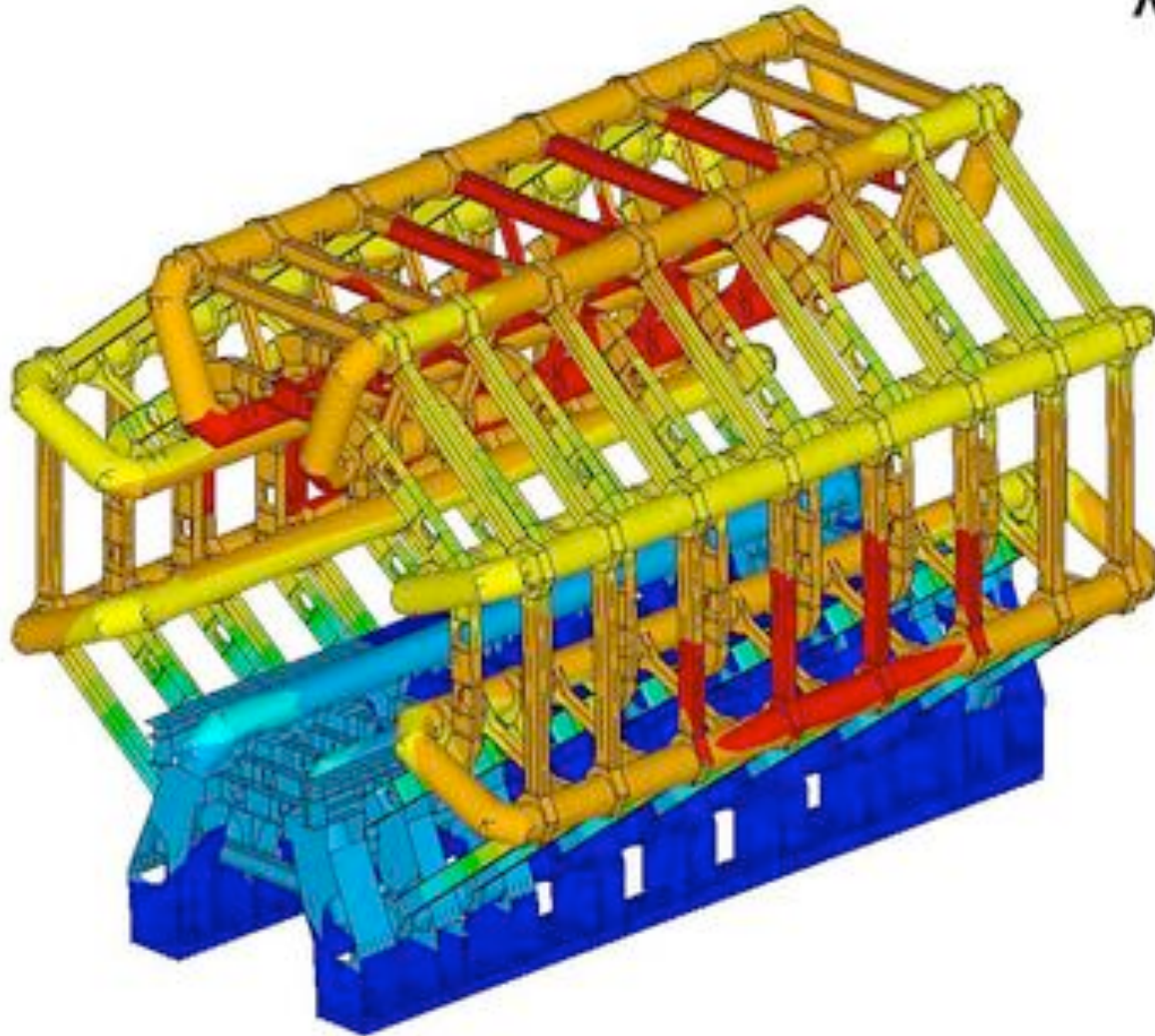
The image shows the interior of the ATLAS detector tunnel, a long, narrow structure filled with complex machinery. The central feature is a large, circular toroidal magnet assembly, which is the core of the detector. This assembly is surrounded by a dense network of pipes, cables, and structural supports. The perspective is from the end of the tunnel, looking down its length. The lighting is bright, highlighting the metallic surfaces and the intricate details of the equipment. The overall atmosphere is one of a highly technical and industrial environment.

# Model 1 – ATLAS Toroidal Magnets

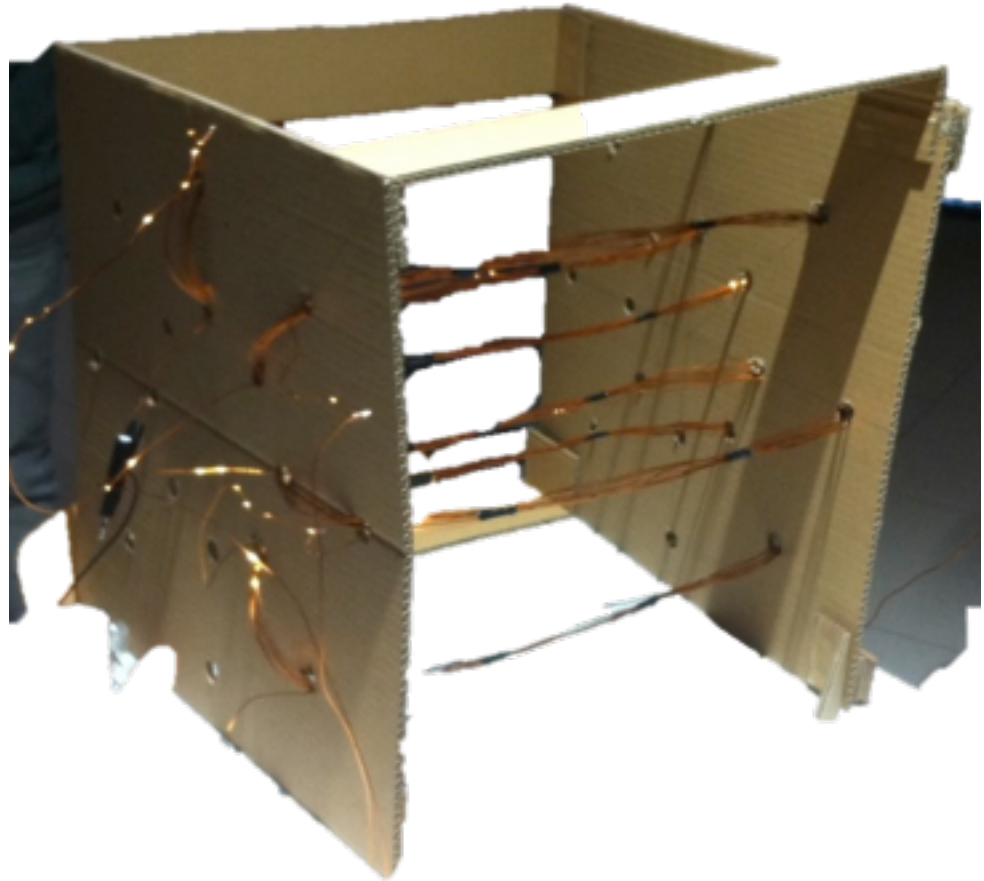
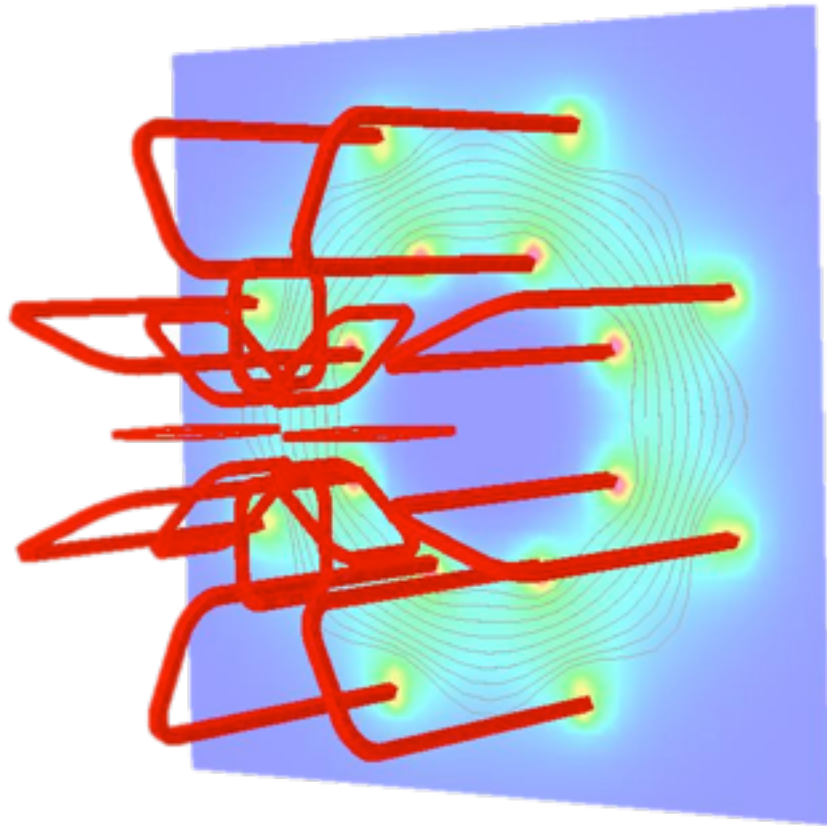


# ATLAS Toroidal Magnets

ANSYS



# ATLAS Toroidal Magnets



# Video

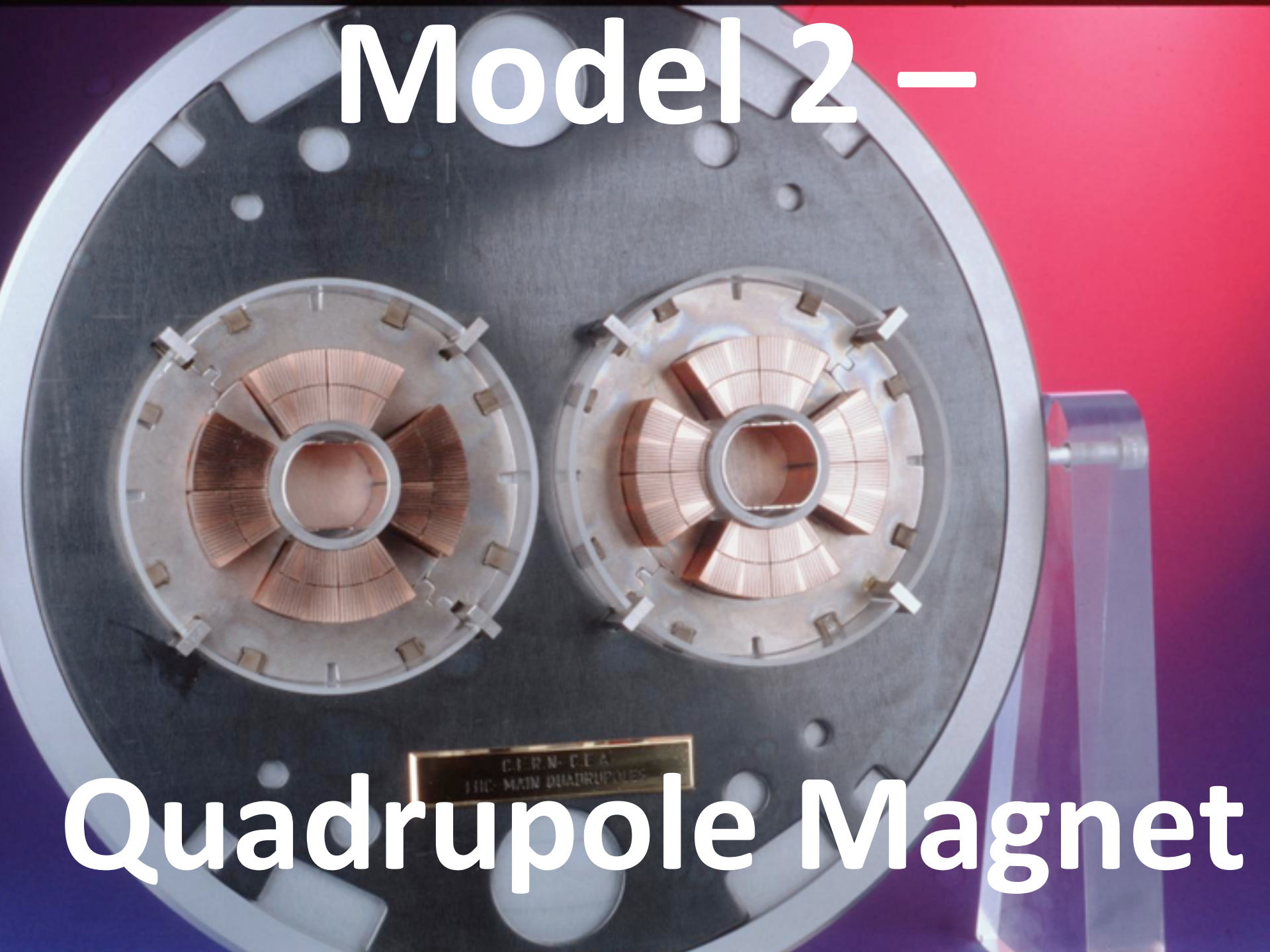


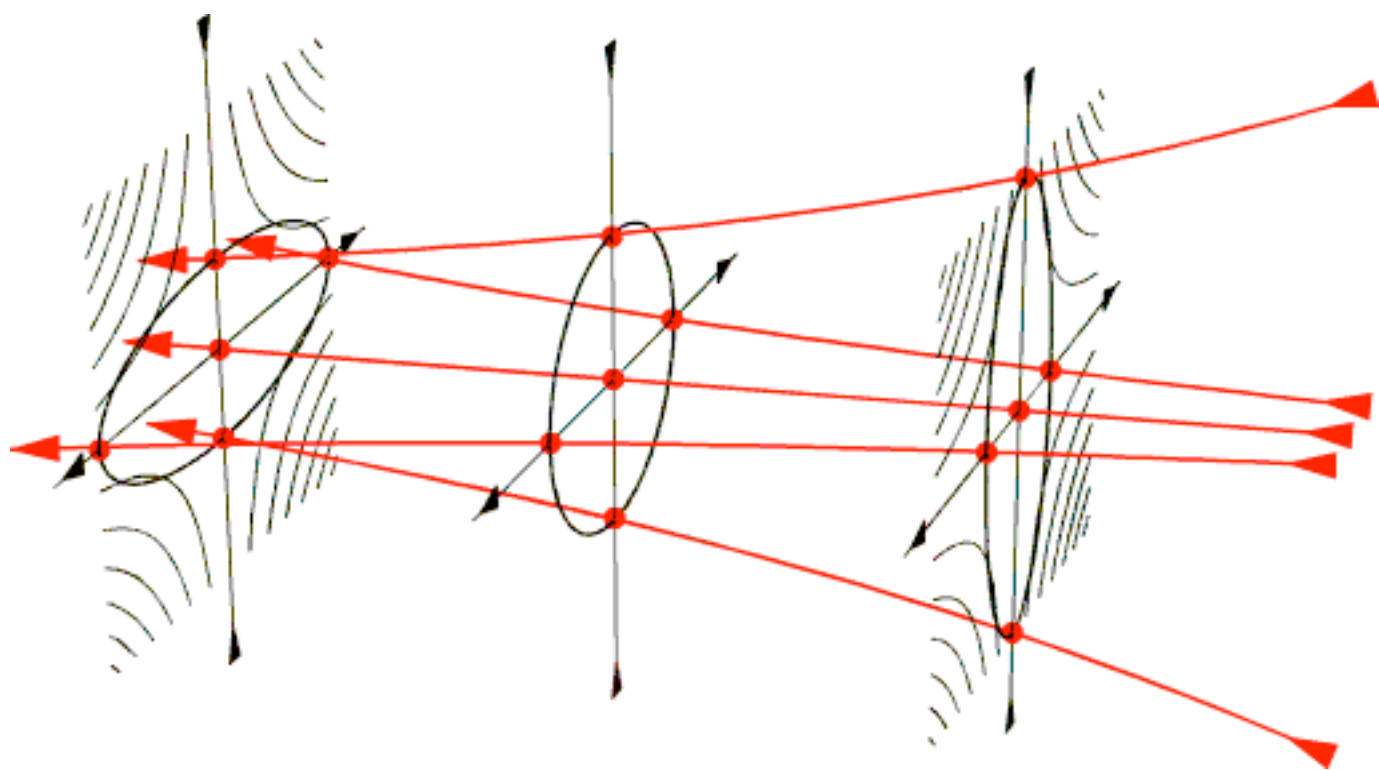
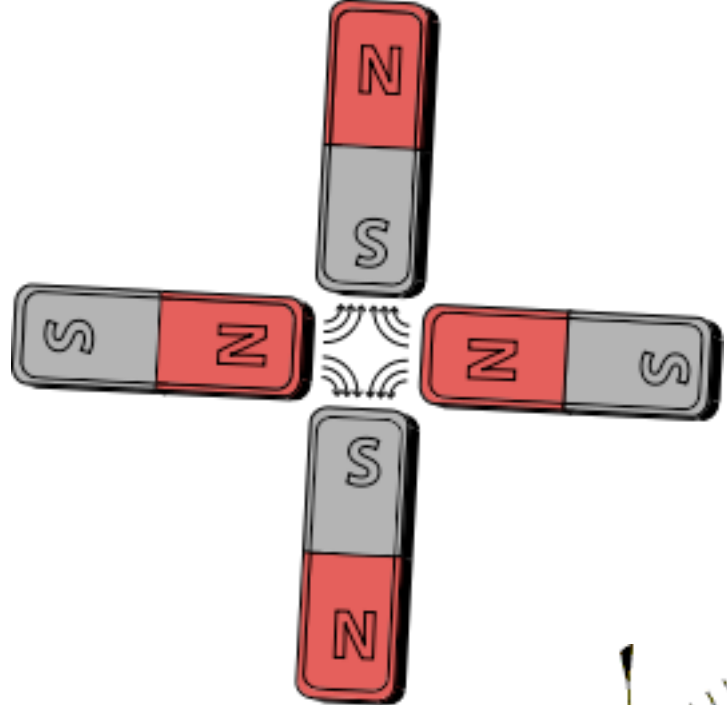


# Model 2 –

# Quadrupole Magnet

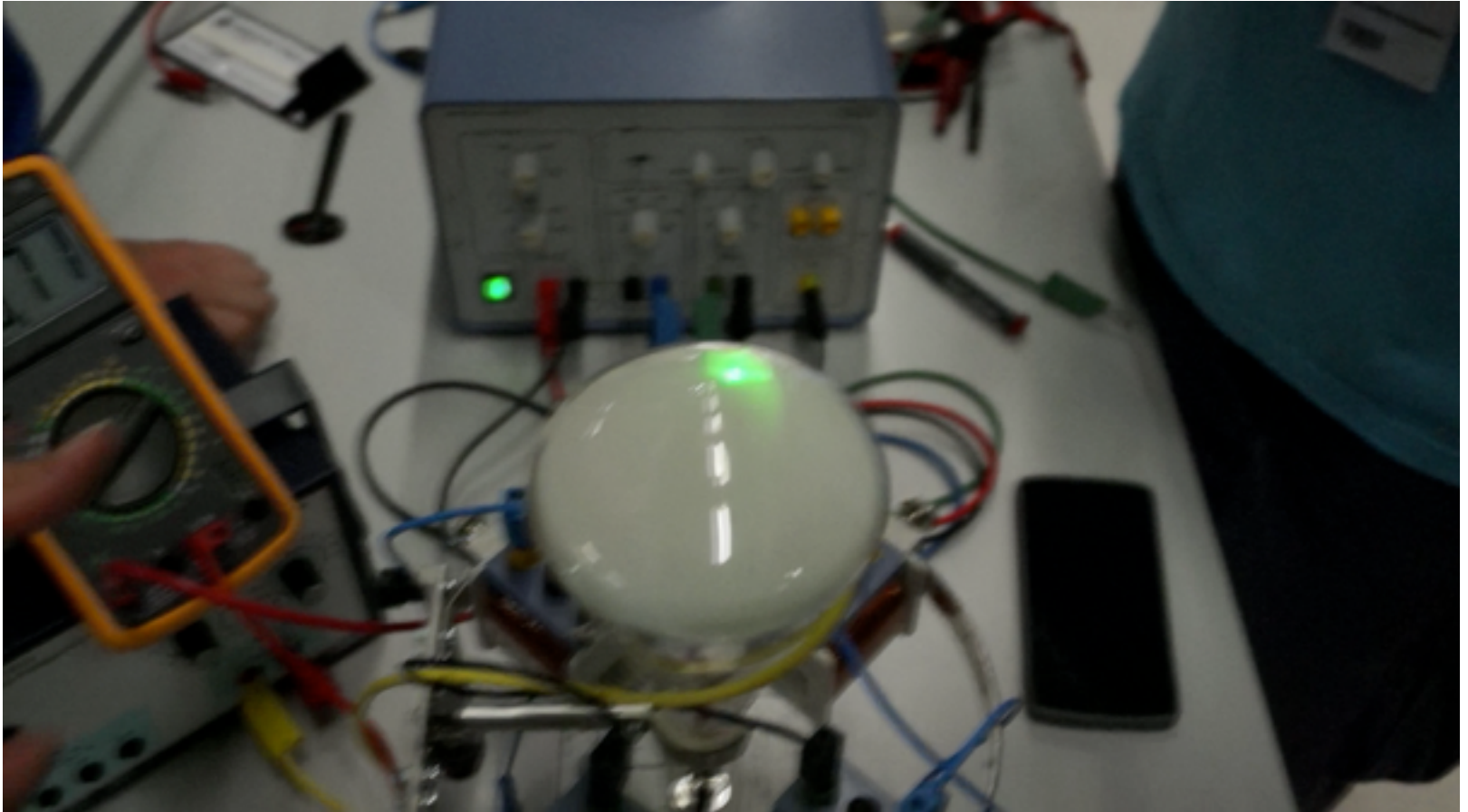
CERN-CEA  
HC-MAIN QUADRUPOLES







# Video

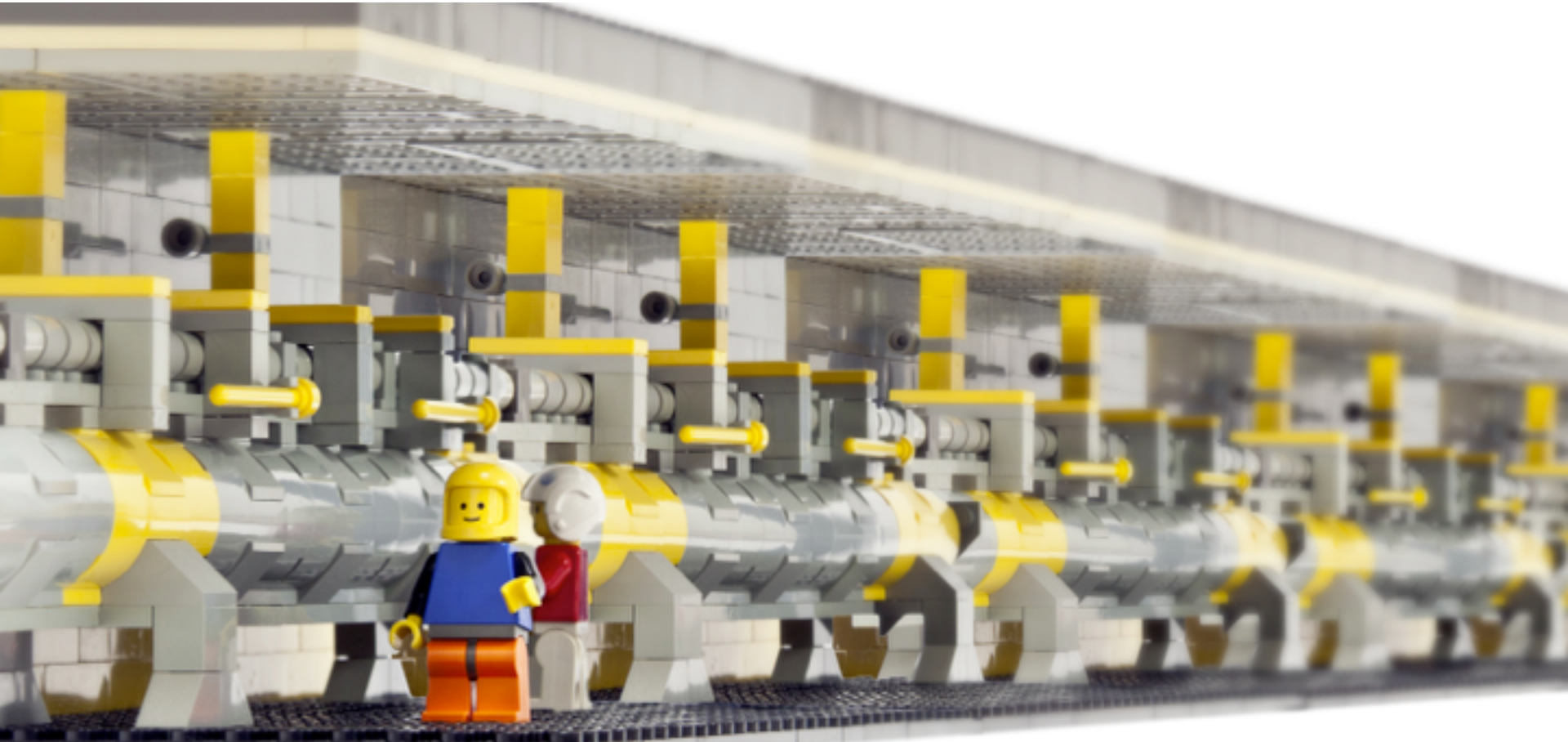


A photograph of a long, orange, cylindrical linear accelerator (Model 3) in a laboratory setting. The accelerator is the central focus, extending into the distance. It is surrounded by various pipes, valves, and electrical equipment. The room has a high ceiling with exposed ductwork and lighting fixtures. The overall scene is industrial and technical.

# Model 3 – Linear Accelerator



# Linac



# Linac

