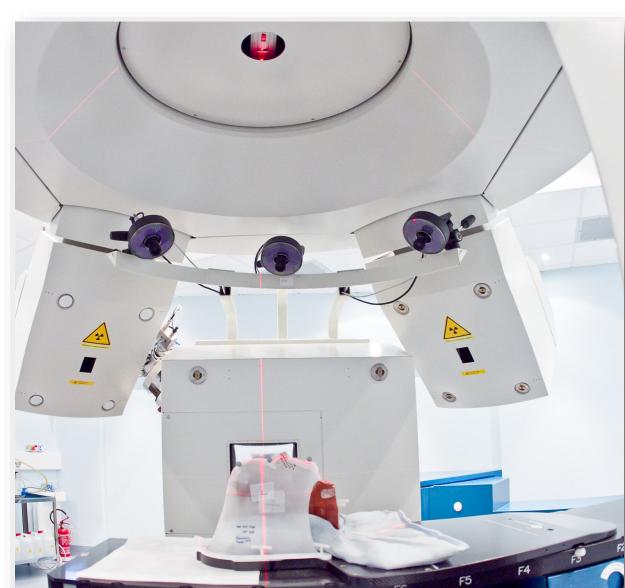
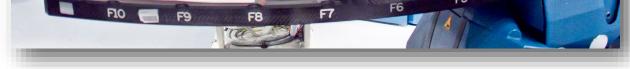


## **Optimization of Medical Accelerators**

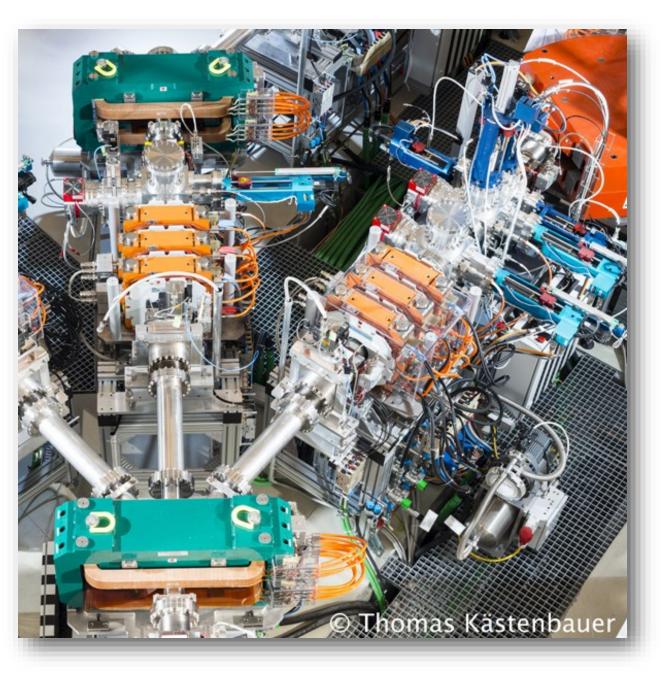
## 2

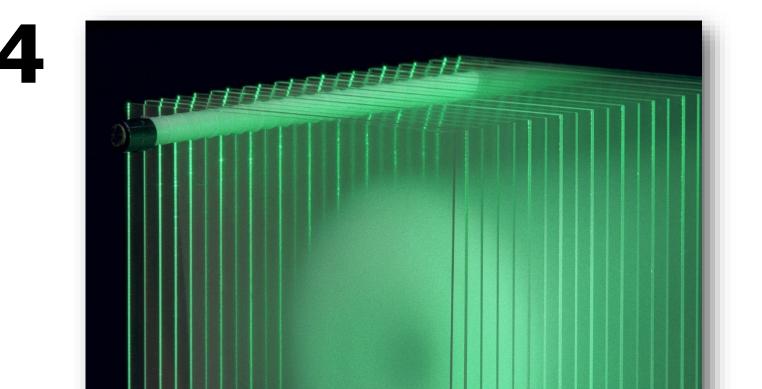


















## 1 Beating cancer sooner

### ••••••••••••••••••••••••

OMA has received 4 M€ of funding from the EU to enhance ion beam based cancer therapy. 15 Fellows are carrying out R&D in a truly international research environment.

## 2 Clinical Advantages

Proton beams provide significant advantages for some cancer types as compared to electrons or X-ray beams. OMA optimizes this treatment type via R&D into facility design, advanced imaging methods and beyond state-of-the-art computational tools.

## **Beam Delivery**

#### ••••••••••••••••••••••••••••••

OMA Fellows study new ways to deliver the beam to the patient and fully characterize it during the treatment. This might allow more patients to benefit from this treatment type in the future.

### 4 Physics and Biology

#### ..............................

OMA researchers improve our understanding of the physics and biology of proton beam therapy by applying advanced Monte Carlo techniques for beam tracking and treatment planning.

# 5

## **European Training**

#### .........

OMA training courses take place at venues across Europe. Our Fellows are embedded into an expert network that joins universities, research centers, clinical facilities and industry partners.

## 6 Next Generation

Within OMA the Fellows will be trained in a broad range of skills, spanning physics, oncology, engineering, IT, modelling, as well as more generic skills, such as project management, networking or scientific writing.



http://www.marie-curie-day-2017.org

<u>More details</u> c.p.welsch@liverpoool.ac.uk www.quasar-group.org





This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 675265.