

OncoRay – National Center for Radiation Research in Oncology, Dresden

WELCOME



Wifi:

Network: UKD_Dozent
Username: ukd-guest536
Password: mvhffjs3



is also available



Universitätsklinikum
Carl Gustav Carus



OncoRay – National Center for
Radiation Research in Oncology, Dresden

Welcome note

7th International workshop
for planning and delivery of radiotherapy to non-static targets

Antje Knopf, Christoph Bert, Kristin Stützer, Christian Richter



Universitätsklinikum
Carl Gustav Carus



- **Where we are** ...*brief info about OncoRay*
- **Who we are** ...*participants*
- **What we will be doing** ... *organizational infos*

Some facts about OncoRay



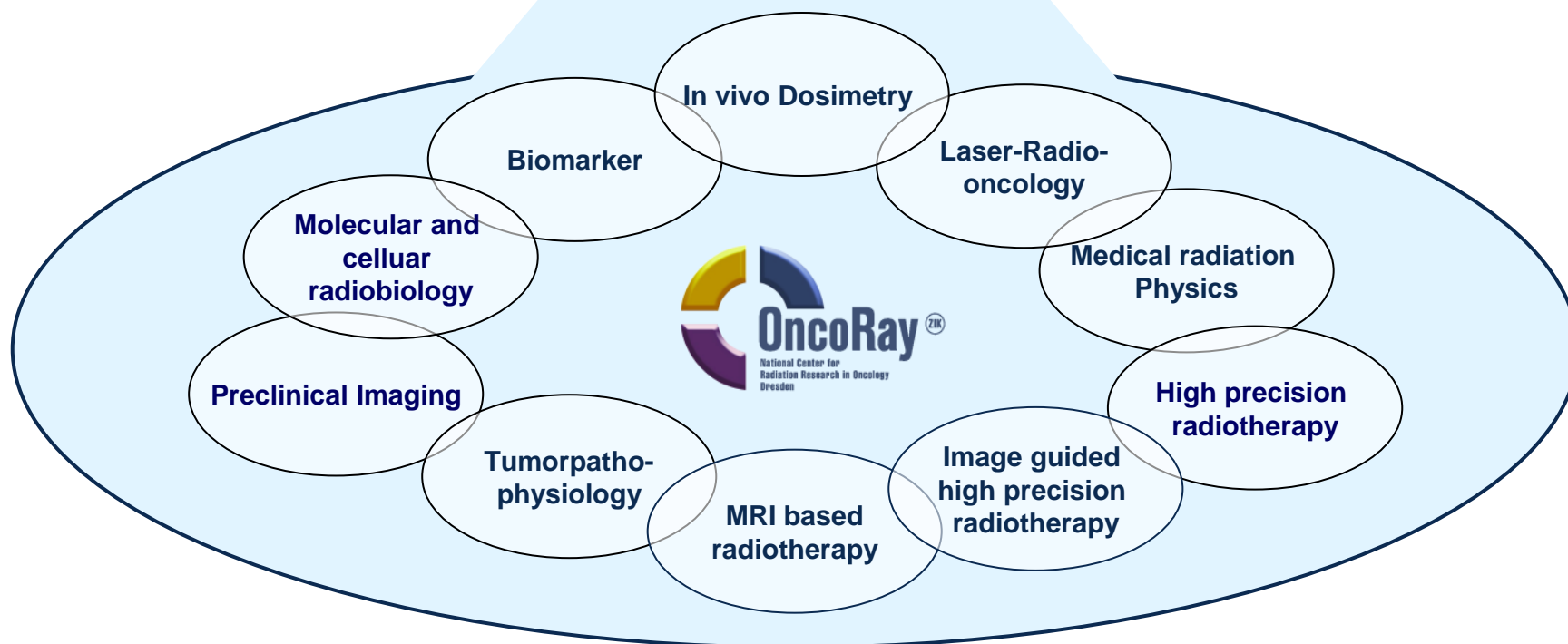
- **Funded in 2004 with federal funding**
- **Joint center operated and supported by:**
 - Technical University Dresden
 - Helmholtz-Center Dresden-Rossendorf
 - University Hospital Carl Gustav Carus
- **2010 Nominated National center for Radiation research in Oncology** (together with HIRO/DKFZ in Heidelberg)
- **Focus:** Preclinical and clinical translational research in radiation oncology



OncoRay research groups

Improved treatment of cancer by means of biologically individualized, technically optimized radiotherapy.

Translational research



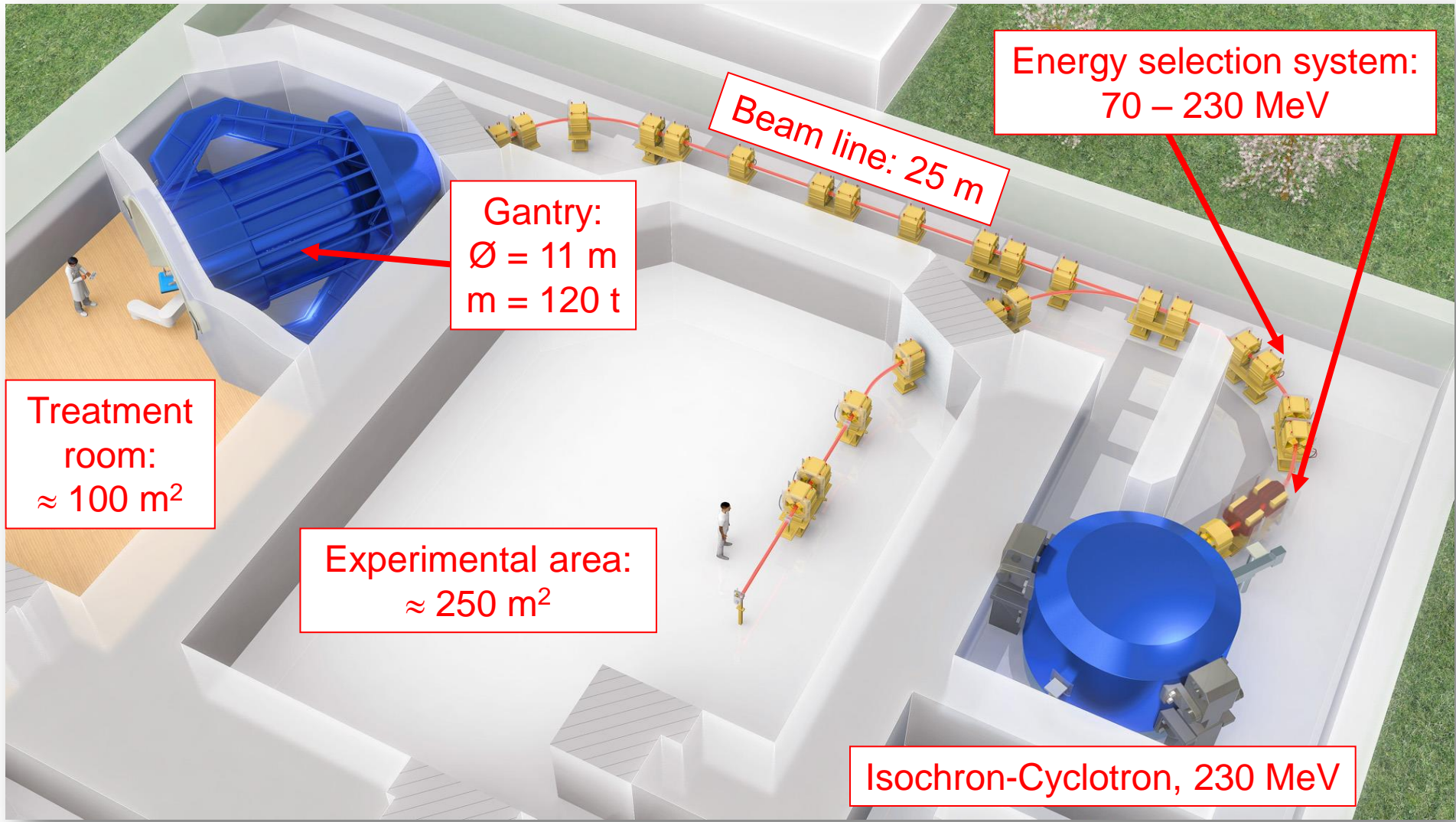
The Dresden proton facility

- **Full integration in existing clinical infrastructure**
- **One clinical treatment room**
- **Research infrastructure in the same building** (animal lab, small animal imaging+irradiation, physics and radiobiological research)

01.04.2010	Start of tendering procedure
xx.01.2011	Contract signed with IBA
xx.07.2012	Start of building construction
16.07.2013	First beam in treatment room
10.06.2014	Start clinical commissioning
12.12.2014	First clinical treatment



The Dresden proton facility



Energy selection system:
70 – 230 MeV

Beam line: 25 m

Gantry:
Ø = 11 m
m = 120 t

Treatment
room:
≈ 100 m²

Experimental area:
≈ 250 m²

Isochron-Cyclotron, 230 MeV

The Dresden proton facility

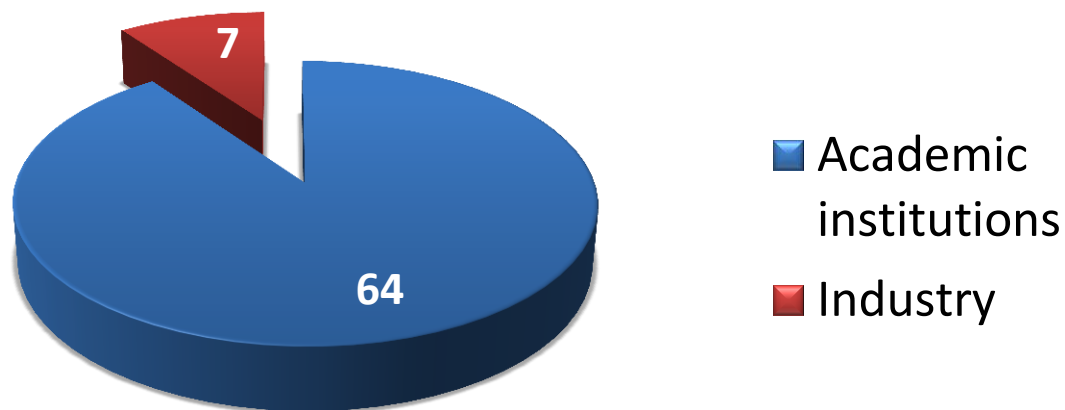


Who we are

*... some statistics about
participants and abstracts*

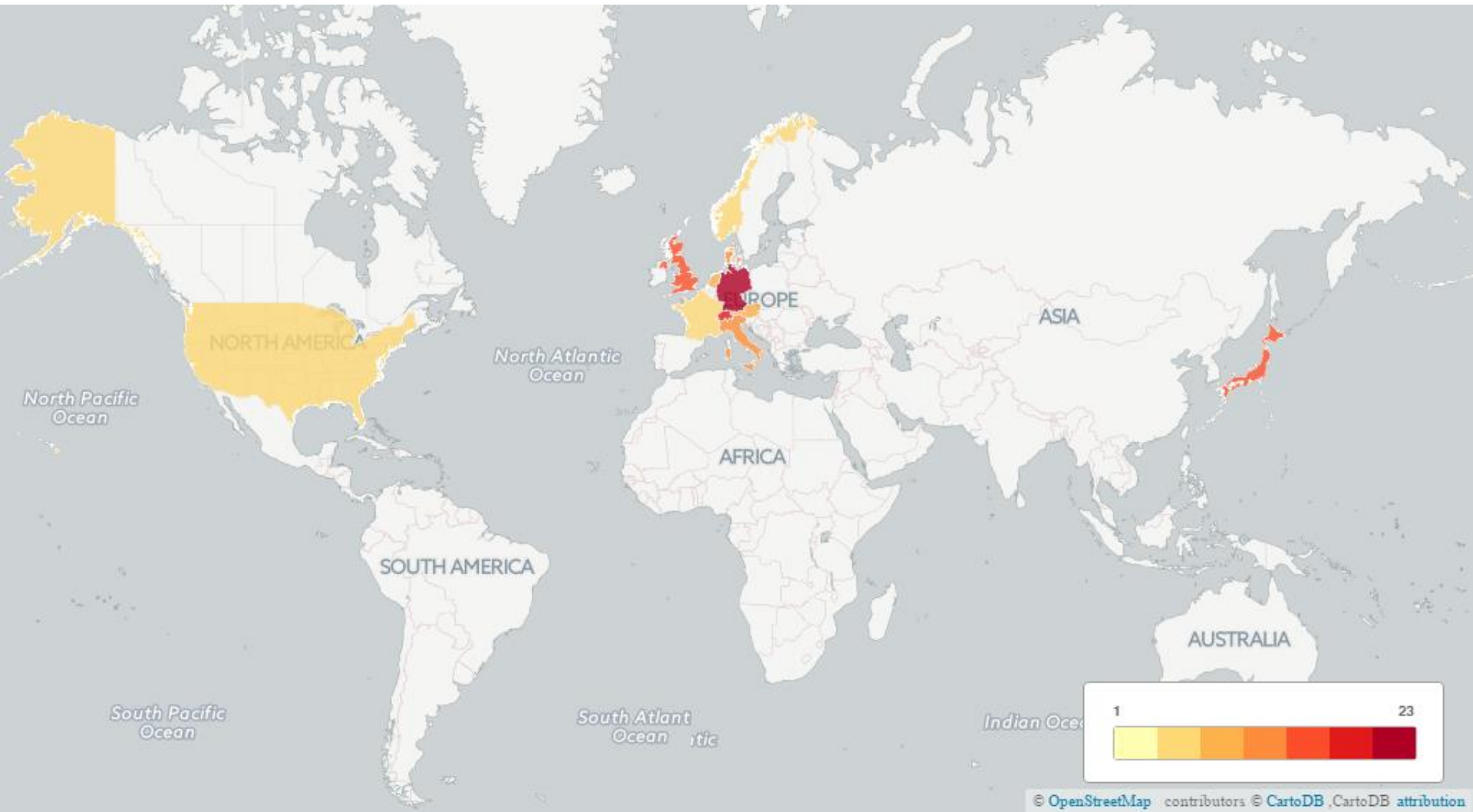
Registrations

71 participants



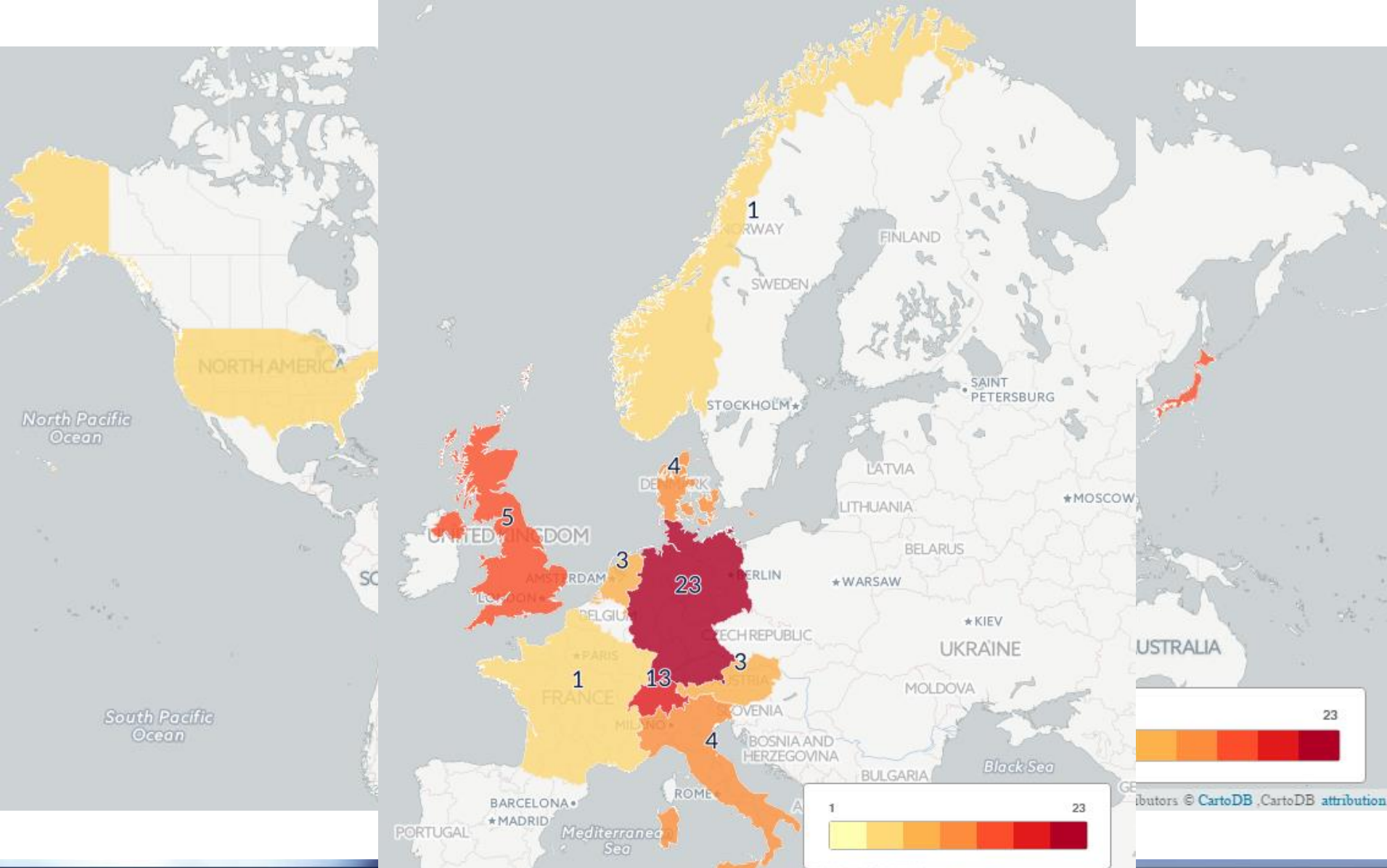
- **64 participants from academic institutions:**
 - From 31 research institutes
 - From 11 countries

Countries of origin (academic participants)



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Countries of origin (academic participants)



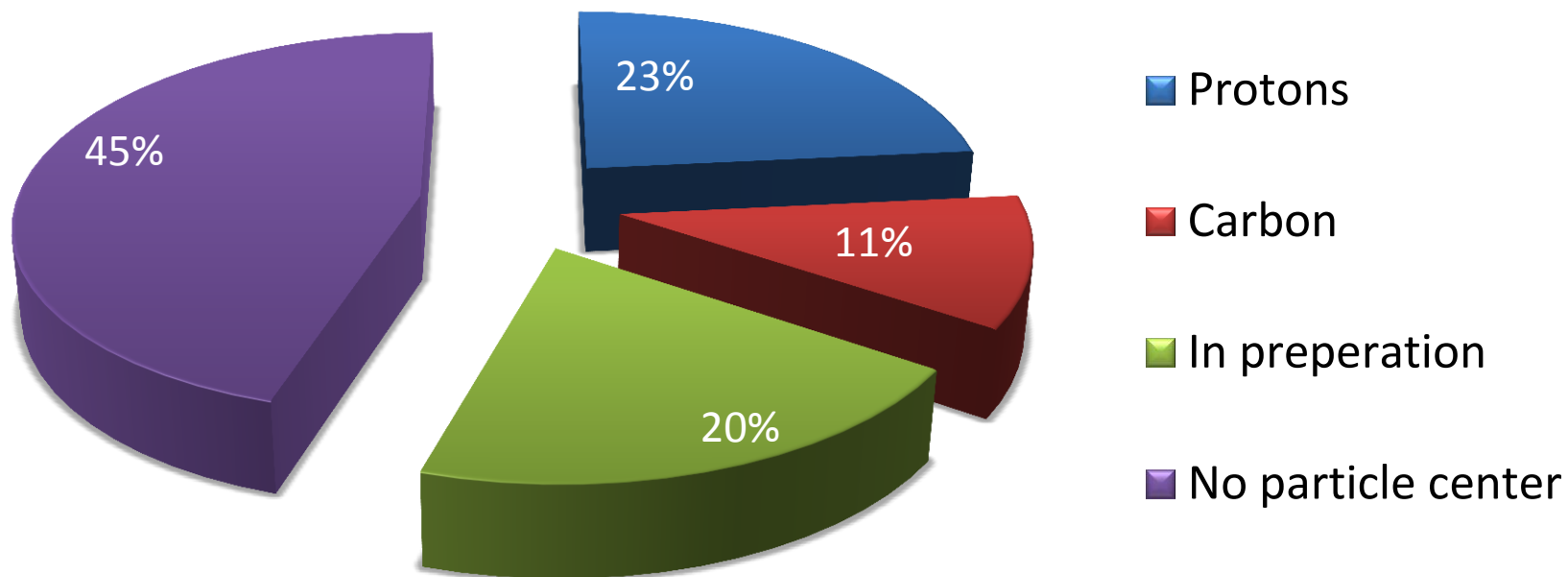
Industry representatives

7 representatives (from 12 companies invited)



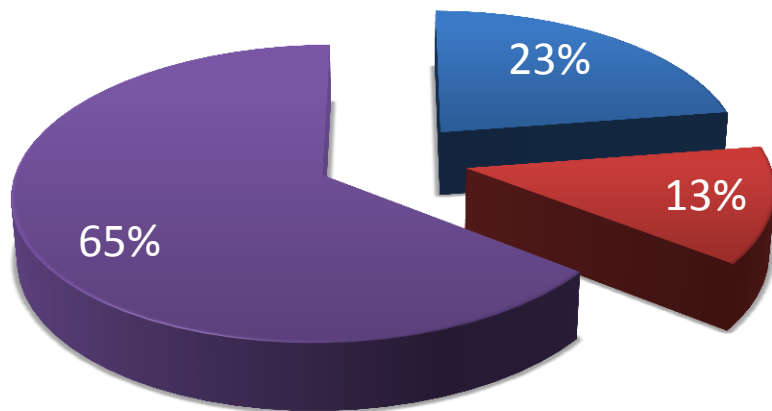
Academic participants: Particle vs. Non-Particle

Participants from particle centers



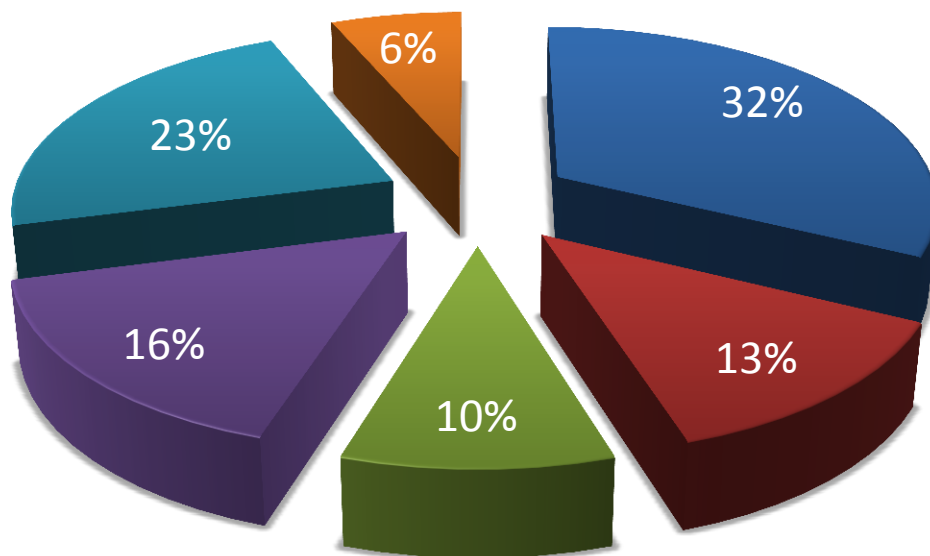
Abstracts

Particle vs. Non-Particle



- Protons
- Carbon
- Not particle related

Topics



- 4D DOSE CALCULATIONS AND DOSIMETRIC ANALYSES
- CLINICAL APPLICATIONS
- 4D IMAGING
- MEASUREMENTS AND PHANTOM STUDIES
- MOTION ACQUISITION BY ULTRASOUND AND MOTION MODELLING
- DATABASES

What we will be doing the next two days

... some organizational infos

THURSDAY, 26TH NOVEMBER 2015

9:30	WELCOME NOTE	
10:00-11:30	CURRENT CLINICAL PRACTICE	
	<ul style="list-style-type: none">– REPORT ON A SURVEY ON 12 PARTICLE THERAPY CENTERS– CLINICAL POINT OF VIEW AND GENERAL OVERVIEW– PRACTICAL EXPERIENCE AND NEEDS FROM A CLINICIANS POINT OF VIEW	<p>ANTJE KNOPF (ICR LONDON)</p> <p>MICHAEL BAUMANN (ONCORAY DRESDEN)</p> <p>STEPHANIE COMBS (TU MÜNCHEN)</p>
11:30-13:00	LUNCH	

Lunch



Don't forget your vouchers!



April 2015

THURSDAY, 26TH NOVEMBER 2015

13:00-14:30	4D + ROBUST TREATMENT PLANNING	
	<ul style="list-style-type: none"> - WHAT HAVE COMMERCIAL SYSTEMS TO OFFER – WHAT DO WE NEED? - 4D MONTE CARLO - ROBUST PLANNING AND MARGIN CONCEPTS: WHAT IS THE WAY TO GO? 	<p>FRANCESCA ALBERTINI (PSI VILLIGEN)</p> <p>MARCUS ALBER (AARHUS UNIVERSITY)</p> <p>MISCHA HOOGEMAN (ERASMUS MC ROTTERDAM)</p>
14:30-17:00	COFFEE BREAK + POSTERS	
17:00-17:30	MOTION MONITORING – IGRT – ART (I)	
	<ul style="list-style-type: none"> - WHAT CAN WE LEARN FROM IGRT OF PHOTONS? 	<p>ANNE RICHTER (UNIVERSITY HOSPITAL WÜRZBURG)</p>
17:45-18:30	SITE TOUR	
19:30	CONFERENCE DINNER	



19:30 Workshop Dinner

Direct route from OncoRay:
Tram #12 to Leutewitz, exit Postplatz

⇒ If you want: Let's meet 6:50 pm in the Lobby



08:30-09:30	MOTION MONITORING – IGRT – ART (II)	
	<ul style="list-style-type: none"> – Integration of new imaging capabilities in proton therapy – What is new in motion monitoring and motion modelling 	TONI LOMAX (PSI VILLIGEN) GUIDO BARONI (POLITECNICO DI MILANO)
09:30-10:00	COFFEE BREAK	
10:00-11:30	MOTION MODELLING AND DEFORMABLE REGISTRATION	
	<ul style="list-style-type: none"> – New developments and improvements in DIR – Relating motion to external surrogates – How to verify DIR? Can we use DIR in the clinic and for which purpose? 	HUGO FURTADO (MEDICAL UNIVERSITY OF VIENNA) DANIEL LOW (UCLA) DAVE HAWKES (UNIVERSITY COLLEGE LONDON)
11:30-13:00	LUNCH	
13:00-14:30	4D DOSIMETRY	
	<ul style="list-style-type: none"> – Overview in vivo verification including 4D capabilities – 4D simulation of secondary emissions for in vivo verification – Prompt-Gamma techniques and its 4D capabilities 	WOLFGANG ENGHARDT (ONCORAY DRESDEN) KATIA PARODI (LMU MUNICH) GUNTRAM PAUSCH (ONCORAY DRESDEN)
14:30-14:45	COFFEE BREAK	
14:45-15:45	PANEL DISCUSSION	
15:45-16:00	SUMMARY	
	Report, Poster award, Location & focus next year	

It is about your comments & questions



Enjoy the workshop, enjoy your stay in Dresden



1) Fried potato patty

with salad and chive
(vegetarian)

(upstairs)

2) Baked Coalfish

with spinach-cheese-filling,
mashed potatoes and cucumber salad

(upstairs)

Gourmed) Thai-like beef stripes

with rice and chinese cabbage

(downstairs)