

2024 *Satellite event*

ENDOCAS
CENTER FOR COMPUTER ASSISTED SURGERY



Servizio
Sanitario
della
Toscana



AZIENDA OSPEDALIERO
UNIVERSITARIA PISANA



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DI PISA



OT Digital deep dive meeting 2024

PISA - 15 June 2024

Dive meeting on
**Digital innovations around the operating room
in Orthopaedics and Traumatology**

Congress Venue :
**Polo Didattico Porta Nuova Università di Pisa
Via Leonardo da Vinci, 15, 56122 Pisa PI Italy**



www.otdigital.eu

Conference ABSTRACT

Scientific progress and technical innovation prompted the development of novel devices and instrumentation to assist medical doctors during surgical operations.

We benefit from a more and more integrated digital surgery ecosystem, where surgical robots, augmented reality visors, enhanced education immersive experience, 3D custom implants and surgical tools with artificial intelligence enable systems to support the surgeon with application-specific digital surgery pathways.

Despite these innovations' numerous advantages, they have not yet become standard in orthopaedic or trauma surgery practice.

Effective scientific advancement often necessitates a paradigm shift. In this context, adopting new operating room solutions, such as collaborative robotics and augmented reality, must go hand in hand with changes in habits, educational curricula, benchmarks, and attitudes.

How can we accelerate and facilitate this paradigm shift?

Let's discuss it together in Pisa on June 15 2024 during the OTdigital deep dive event!

Organizers:

Prof **Parchi Paolo** (University of Pisa) - Prof **Vincenzo Ferrari** (University of Pisa) –
Prof **David A. Back** (Charité Berlin) - Dr **Koroush Kabir** (Helios Klinikum Wuppertal)
Cristiano Paggetti (Orthokey s.r.l.)

8:00-08:20 Registration

08:20-08:30 Introduction: **Prof Emanuele Cigna** Director of the Endocas Center University of Pisa

08:30 – 09:30 Session 1 **Augmented Reality in Orthopedic Surgery experience sharing**

Chairs: David Back, Stefano Giannotti, Marina Carbone

08:30 **Augmented reality in surgery from benchmark to the operating room** - Vincenzo Ferrari

08:45 **An Augmented Reality-based Simulator for Orthopedic Surgery Training** - Luohong Wu

09:00 **Augmented Reality to guide the surgical procedures** - Giovanni Badiali

09:15 Discussion 15 min

09:30 10:30 Practical and demo session 1:

Robotics – Navigation – Augmented Reality – Surgical simulators

10:30 – 11:00 Coffee break

11:00 – 12:00 **Discussion battle and audience Q&A** – MC David Back

Cristiano Paggetti – Guido Cuccadu - Gianluca Vadalà – Arnaud Clavè –

Paolo Parchi – Vincenzo Ferrari - Stefano Giannotti

“Digital OR where we are and where will go”

11:00 12:00 Practical and demo session 2:

Robotics – Navigation – Augmented Reality – Surgical simulators

13:00 -14:00 LUNCH

14:00 – 15:00 Session 2: **Simulation and Surgical Education**

Chairs: Paolo Parchi , Gianluca Vadalà, Lorenzo Andreani

14:00 **Surgical Simulation using patient's specific 3D printed models** - Marina Carbone

14:15 **3D printing custom made implant in oncologic surgery** - Domenico Campanacci

14:30 **Surgical Navigation in Spine Surgery** - Francesco Costa  Online

14:45 Discussion 15 min

15:00 16:00 Practical and demo session 3:

Robotics – Navigation – Augmented Reality – Surgical simulators

16:00 – 16:30 Coffee break

16:30 -17:45 Session 3 **Surgical robotics – experiences and challenges**

Chairs: Bonicoli Enrico , Cristiano Paggetti, Stefano Marchetti

16:30 **Robotic surgery in Knee Arthroplasty the experience of a high-volume center** - Stefano Rossi

16:45 **Robotic assisted Surgery in Spine surgery** - Gianluca Vadalà

17:00 **Strategies and Criteria to assess innovation in orthopedic surgery** - Arnoud Clavè

17:15 **Robotic platforms in orthopaedics surgery a trend or a valuable aid: where we are and where will go** - Cesare Faldini

17:30 Discussion 15min

17:45 - 18:45 Practical and demo session 4:

Robotics – Navigation – Augmented Reality – Surgical simulators

18:45 Wrap-up and Conference Conclusion

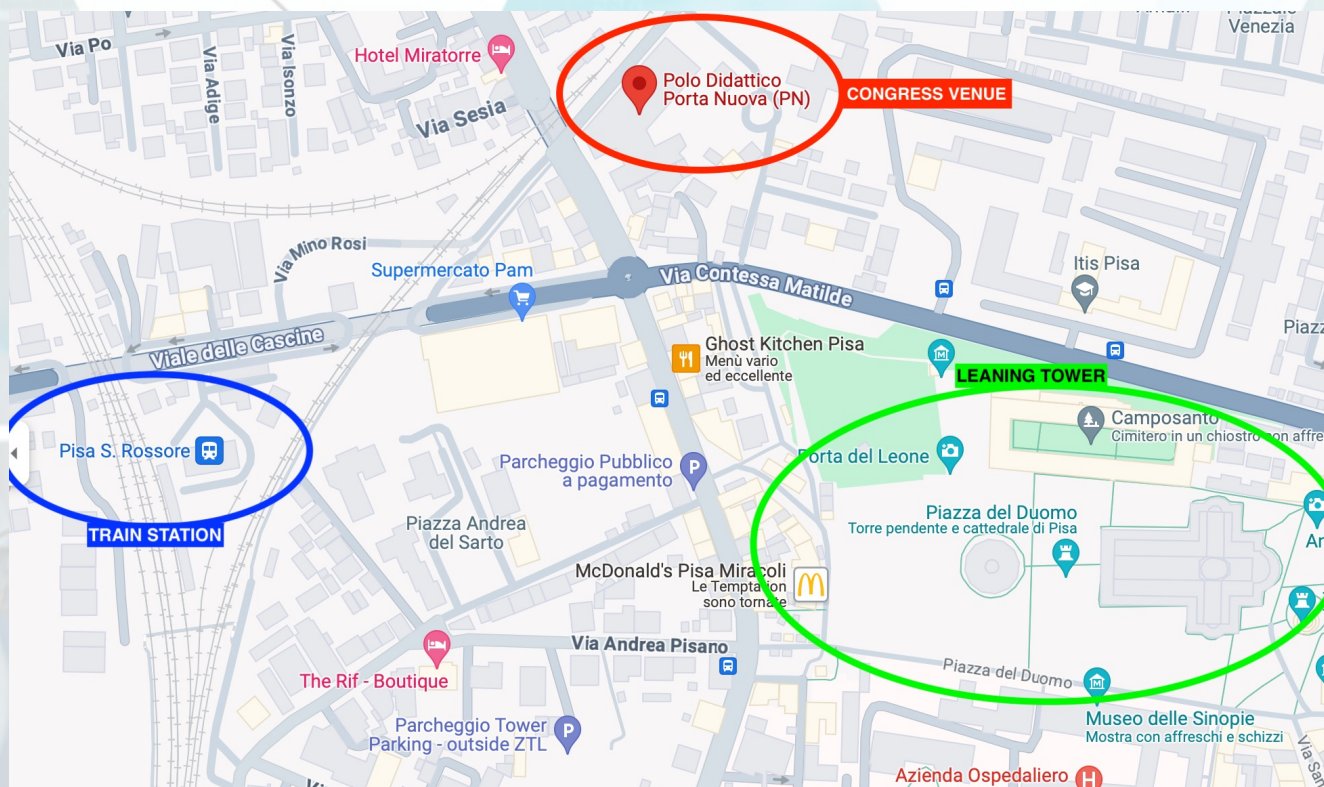
Online Meeting Link:

<https://msteams.link/V174>

Congress Venue:

Polo Didattico Porta Nuova

[Via Leonardo da Vinci, 15, 56122 Pisa PI](https://www.google.com/maps/place/Via+Leonardo+da+Vinci,+15,+56122+Pisa+PI)



Online Meeting Link:

<https://msteams.link/V174>



Info and pre-registration: paolo.parchi@unipi.it

www.otdigital.eu

Many thanks for their non-conditioned support:

