
2026 SEAAPM Annual Meeting February 5 – 7, 2026

The Physics of Smart Health: Reimagining the Role of the Physicist in the Age of AI

*Program Directors: Greeshma A. Agasthya, PhD, SEAAPM President-Elect
and Anuj J. Kapadia, PhD, SEAAPM President*

Renaissance Raleigh North Hills Hotel, Raleigh, North Carolina

Thursday, February 5th

7:00 – 8:00 AM Breakfast – Visit with exhibitors

8:00 – 8:15 AM **Welcome and Introduction**
Anuj J. Kapadia, PhD, Oak Ridge National Laboratory, TN

Invited talks – Session 1 - The Augmented Physicist: Human-AI Collaboration in the Future Clinic

8:15 – 8:45 AM Optimizing Human-AI Collaboration - Focus on the Human
Speaker: Elizabeth Krupinski, PhD, Emory Winship Cancer Institute TBD

8:45 – 9:15 AM Human-AI collaboration: Transforming Clinical Decision Making in Oncology
Speaker: Issam El Naqa, PhD, Moffitt Cancer Institute

9:15 – 9:45 AM Title: From Research to Production: Building the Rails for Clinical AI
Speaker: Rafe McBeth, University of Pennsylvania

9:45 – 10:15 AM Panel Discussion

10:15 – 10:45 AM **Morning Break – Visit the Exhibitors**

General Presentations – Session 1 (8 mins per talk + 2 mins Q&A)

10:45 – 10:55 AM Ultrasound QA for Prostate Seed Implantation Using a 3D-Printed Phantom and
Sous Vide Immersion Circulator
Speaker: Todd Jenkins, ECU Health Beaufort Hospital

10:55 – 11:05 AM Custom 3D-Printed HDR Brachytherapy Applicator for Treatment of Digital
Squamous Cell Carcinoma
Speaker: Corrie Williams, Novant Health

11:05 – 11:15 AM Evaluation of a 3D-printed holder for off-axis Winston-Lutz QA: Does it improve
positional reproducibility?

Speaker: Justin Simmons, Duke University

11:15 – 11:25 AM

Passing Criteria Analysis for Changes in Thickness using EPID
Speaker: Hayden West, Georgia Institute of Technology

11:25 – 11:35 AM

Measurement of Effective SSD Variations in Electron Therapy as a Function of Cutout Size and Beam Energy
Speaker: Hunter Salmon, Novant Health

11:35 – 11:45 AM

Robustness Evaluation of Proton Treatment Plans Using ΔAUC
Speaker: Taylor Ramson, University of Tennessee, Knoxville

11:45 – 11:55 AM

APEX[®] – A Physicist's Journey through the Accreditation Process
Speaker: Robert Rodgers, Vanderbilt University Medical Center

12:00 – 1:00 PM

Lunch Break – Visit the Exhibitors

AAPM President Session

1:00 – 1:45 PM

Fireside chat with Dr. David Gammel, *Executive Director, AAPM*

Invited talks – Session 2

1:45 – 2:15 PM

Title: AI in Medical Physics: Prevalence, Preparation and Perspectives
Speaker: Daniel Bourland, PhD, Wake Forest University

2:15 – 2:45 PM

Title: Being a human medical physicist in the age of AI
Speaker: Ehsan Samei, PhD, Duke University

2:45 – 3:15 PM

Title: Precision Cancer Care: AI's Role in Imaging and Radiation Therapy from an Industry Perspective
Speaker: Nilesh Mistry, PhD, Siemens Healthineers

3:15 – 3:45 PM

Panel Discussion

3:45 – 4:00 PM

Afternoon Break – Visit the Exhibitors

4:00 – 4:15 PM

Introduction to AI in action
Anuj Kapadia, PhD, Oak Ridge National Laboratory, TN

4:15 – 5:00 PM

AI in Action – 1 [Senior Medical Physicists vs. Students aided by LLM]
Topic: TBD

5:00 PM onwards

Unscheduled evening. Enjoy time exploring North Hills and local dining options

Friday, February 6th

7:00 – 8:00 AM Breakfast

8:00 – 8:15 AM **Welcome and Introduction**
Greeshma Agasthya, PhD, Georgia Institute of Technology, GA

Invited talks – Session 2 - AI in Medical Physics: Driving Innovations in Clinic and Research

8:15 – 8:45 AM AI in Medical Physics: Advances, Future Directions, and Clinical Impact
Speaker: Lei Ren, PhD, University of Maryland School of Medicine

8:45 – 9:15 AM Advancing Radiotherapy with Foundation Models for Medical Image Analysis
Speaker: Xiaofeng Yang, PhD, Emory University School of Medicine

9:15 – 9:45 AM Title: Designing Imaging AI to Bridge Patterns, Predictions & Precision Medicine
Speaker: Satish Viswanath, PhD, Emory University School of Medicine

9:45 – 10:15 AM Panel Discussion

10:15 – 10:45 AM **Morning Break – Visit the Exhibitors**

General Presentations – Session 2 (8 mins per talk + 2 mins Q&A)

10:45 – 10:55 AM Out-of-field dose mapping using a small-volume plastic scintillating detector for a closed bore linac: Feasibility study and comparison with commercially available detectors
Speaker: James Burns, Vanderbilt University Medical Center

10:55 – 11:05 Best paper award talk: The New CMS Measure of Excessive Radiation Dose or Inadequate Image Quality in CT: Issues and Ambiguities – Perspectives From an AAPM-Commissioned Panel
Speaker: Jered Wells, Duke University

11:05 – 11:15 AM SGRT in Error Detection in Radiation Oncology
Speaker: Stephanie Parker, Atrium Health Wake Forest Baptist High Point Medical Center

11:15 – 11:25 AM Lessons learned during a new vault design and build project with linear accelerator relocation and upgrade
Speaker: Robert Rodgers, Vanderbilt University Medical Center

11:25 – 11:35 AM Evaluation of DNA Damage from α - Radiation: Effects of Cell Morphology, Size, Particle Energy and Source Distribution
Speaker: Yang Chen, Georgia Institute of Technology

11:35 – 11:45 AM A computational evaluation of targeted radiopharmaceutical dosimetry: comparison of alpha and beta emitting radiopharmaceuticals
Speaker: Jayasai Rajagopal, Oak Ridge National Laboratory

11:45 – 11:55 AM HPV-Stratified Causal Digital Twins for Head and Neck Cancer: Interpretable Counterfactual Survival Modeling under Chemoradiotherapy versus Radiotherapy
Speaker: Keyur Shah, Emory University School of Medicine

12:00 – 1:00 PM **Lunch Break – Visit the Exhibitors**

Keynote Session

1:00 – 1:05 PM **Keynote Speaker Introduction**
Greeshma Agasthya, PhD, Georgia Institute of Technology

1:05 – 1:50 PM Title: Medical Physicists, AI, and MIDRC
Speaker: Maryellen Giger, PhD, University of Chicago, Chicago, IL

1:50 – 2:10 PM **Q&A**

MedPhys Slam Session

2:10 – 2:20 PM **MedPhys Slam Introduction**
Anuj J. Kapadia, PhD, Oak Ridge National Laboratory, TN

2:20 – 2:25 PM Application of Live Cherenkov Imaging for Patient Positioning and Treatment Delivery Evaluation
Speaker: Ila Farhang, Atrium Health

2:25 – 2:30 PM The fabrication and evaluation of a fully 3D printed tungsten infused collimator with electron beam shaping
Speaker: India Wood, Wake Forest University School of Medicine

2:30 – 2:35 PM Understanding & Optimizing Isocenter Placement in Single- and Multi Isocenter Linear Accelerator-Based Radiosurgery Treatment Planning for Multiple Brain Metastases
Speaker: Justin Napolitano, Wake Forest University School of Medicine

2:35 – 2:40 PM Evaluating the necessity of verification image between couch in non-coplanar proton therapy for brain and head and neck patients: a year long retrospective analysis
Speaker: Sheanna Allen, Advocate Health

2:40 – 3:00 PM **MedPhys Slam Q&A**

3:00 – 3:20 PM **Afternoon Break – Visit the Exhibitors**

3:20 – 4:00 PM AI in Action – 2 [Clinical Medical Physicists vs. Non-clinical physicists assisted by LLM]
Topic: TBD

4:00 – 5:30 PM

Speed mentoring session

5:30 – 6:30 PM

SEAAPM Social Event

A special thanks to our sponsor of this evening: IBA Dosimetry

Saturday, February 7th

7:00 – 8:00 AM

Breakfast

8:00 – 9:00 AM

Title: Educators Road Show (AAPM Committee on Medical Physicists as Educators)
Speaker: Chet Ramsey, PhD, University of Tennessee Knoxville

General Presentations – Session 3 (8 mins per talk + 2 mins Q&A)

9:00 – 9:10 AM

Title: Systematic Underestimation of Tumor Volume by Caliper Measurements in Murine Head and Neck Cancer Models
Speaker: Katelyn Kelly, Duke University

9:10 – 9:20 AM

Title: Output factors and Equivalent Square Field Sizes for 3D Conformal Spatially Fractionated Radiation Therapy (SFRT) Fields
Speaker: Amoabeng Evelyn, Wake Forest University School of Medicine

9:20 – 9:30 AM

Title: Linking PET-Derived Metabolic Texture and Pathology-Based Cellular Topology to Chemoradiation Resistance in Murine HNSCC
Speaker: Casey Heirman, Duke University

9:30 – 9:40 AM

Title: “Measure Thrice, treat once”: Confirming third-party commissioning measurements across multiple sites
Speaker: Jordan Lunsford, Advocate Health

9:40 – 9:50 AM

Title: Tracking Linac Downtime Across 4 Radiation Oncology Clinics within a Single Hospital System
Speaker: Caroline Serafini, Emory University School of Medicine

9:50 – 10:00 AM

Title: Optically Stimulated Luminescence Radiation Dosimetry Characteristics Investigation of Photostimulable Phosphor and Sodium Chloride with CCD Camera
Speaker: Mohammad Alim, ECU

10:00 – 10:10 AM

Out-of-field Dosimetry Comparison Between Varian Ethos and TrueBeam STx Linear Accelerator
Speaker: Gwynne Aull, Duke University

10:10 – 10:30 AM

Morning Break – Visit the Exhibitors

10:30 AM – 11:45 AM

Awards

11:45 AM – 12:00 PM

Closing remarks

Meeting adjourns at 12 PM, followed by the SEAAPM business meeting