

# KEY

- Imaging Education
- Imaging Scientific
- Therapy Education
- Therapy Scientific
- Multi-Disciplinary Scientific
- Professional
- Ultrasound
- Exhibition
- President's Sessions of Note

## PROGRAM AT A GLANCE | SUNDAY, JULY 25

	TRACK 1	TRACK 2	TRACK 3	TRACK 4	TRACK 5	TRACK 6	TRACK 7	TRACK 8
<b>A</b> 10:30 AM – 11:30 AM	<b>International Council Symposium: AAPM Global Engagement; Planning for the Future</b> Moderator: A Marques da Silva Speakers: S Avery, S Parker, J Palta, R Jeraj, G Kim, S Wadi-Ramahi	<b>2021 Annual Student Meeting: Beyond the Clinic - Medical Physics in Industry</b> Moderators: A Khan, R Kolany Speakers: P Naine, M Bellon, C Lin	<b>SAM Imaging Scientific Symposium SIIM-AAPM Joint Symposium on Machine Intelligence in Medical Imaging</b> Moderators: P Nagy, J Siewerdsen Speakers: B Landman, K Brock, J Fessler, K Andriole	<b>SAM Multi-Disciplinary Scientific Symposium Solid State PET in Radiology and Radiation Oncology: from SIPM to AI in the Clinic</b> Moderator: J Zhang Speakers: J Zhang, S Bowen	<b>SAM Therapy Scientific Symposium Affordable Cancer Care for All</b> Moderator: L Court Speakers: C Fumiko, M Weil, M Salehpour, T Ige, M Dosahjh, P Halvorsen, T Netherton	<b>Therapy Scientific Session Artificial Intelligence in Treatment Planning and Delivery</b> Moderators: S Jiang, K Moore	<b>SAM Therapy Educational Course Clinical Implementation of MR-IGRT</b> Moderator: A Sethi Speakers: B Raaymakers, P Yadav, D Hyer, A Sethi	<b>SAM Therapy Guided Tours Patient-Specific QA Devices/Software</b> Moderators: S Koufigar, K Sukumar Speakers: S Koufigar, K Sukumar, J Hamilton, M Napolitano, A Nagle, N Brand
<b>B</b> 11:30 AM – 12:30 PM	<b>Joint Council Symposium: Creativity in Medical Physics</b> Moderator: B Parker Speakers: P Basran, M Giger, B Parker			<b>SAM Multi-Disciplinary Scientific Symposium WMIS/AAPM Joint Symposium: Novel and Theranostic PET Agents</b> Moderators: J Hazle, Y Tai Speakers: T Hope, S Lapi, N Vasdev		<b>Multi-Disciplinary Scientific Session Imaging in Treatment Planning</b> Moderators: D Low, E Omani		
<b>lePD</b> 12:30 PM – 1:00 PM	Imaging Interactive ePoster Discussion <b>New and Emerging Technologies</b>	Imaging Interactive ePoster Discussion <b>CT Radiomics and Clinical Applications</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Segmentation I</b>		Therapy Interactive ePoster Discussion <b>AI in Radiation Therapy</b>	Therapy Interactive ePoster Discussion <b>Brachytherapy Dosimetry</b>		
<b>BREAK   12:30 PM – 1:00 PM</b>								
<b>C</b> 1:00 PM – 2:00 PM	<b>Education Council Symposium: Lessons Learned During the COVID-19 Pandemic, Innovative Approaches to Didactic and Clinical Training</b> Moderator: J Burmeister Speakers: I Barreto, C Watchman, V Montemayor, J Burmeister	<b>SAM Imaging Educational Course Fluoroscopy Dose Management</b> Moderator: R Fisher Speakers: R Fisher, M Mahesh, A Jones	<b>SAM Imaging Scientific Symposium Medical Imaging and Data Resource Center: Imaging in Covid</b> Moderator: M Giger Speakers: M Giger, P Kinahan, M McNeill-Gray, K Myers, S Armato	<b>SAM Multi-Disciplinary Scientific Symposium Novel Imaging Technologies for Motion Management in Radiotherapy</b> Moderator: T Pan Speakers: W Yang, L Ren, T Pan	<b>SAM Therapy Scientific Symposium Advances in Automatic Segmentation, Treatment Planning and QA</b> Moderator: Q Wu Speakers: H Veeraraghavan, Q Wu, E Ford, S Jiang	<b>Imaging Scientific Session Nuclear Medicine and PET</b> Moderators: R Badawi, B Bednarz	<b>SAM Therapy Educational Course Bottleneck Issues in the Clinic Implementation of Monte Carlo Method in Proton Therapy</b> Moderators: L Lin, Y Xiao Speakers: L Lin, J Schuemann, S Leng	<b>Vendor Showcase #1 LAP Laser, LLC</b> 1:00 PM – 1:30 PM  Break   1:30 PM – 2:00 PM
<b>D</b> 2:00 PM – 3:00 PM	<b>Professional Council Symposium: Professional Skills for Future Medical Physicists: A Case Study Example</b> Moderator: B Parker Speakers: R Fahrig, W Newhauser, R Nishikawa			<b>Multi-Disciplinary Scientific Session Motion Assessment and Management</b> Moderators: D Nguyen, Y Zhang		<b>Therapy Scientific Session Patient Safety and Quality Improvement</b> Moderators: J Moran, D Jacqmin	<b>SAM Therapy Educational Course Current Status of Proton Thoracic Radiotherapy</b> Moderator: S Flampouri Speakers: H Li, S Both, S Flampouri	<b>Vendor Showcase #2 LAP Laser, LLC</b> 2:00 PM – 2:30 PM  Break   2:30 PM – 3:00 PM
<b>lePD</b> 3:00 PM – 3:30 PM	Imaging Interactive ePoster Discussion <b>CBCT Image Processing, Image Analysis, and Applications</b>	Imaging Interactive ePoster Discussion <b>Mammography and Tomosynthesis</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Image Guidance: Cone-Beam CT</b>	Interactive ePoster Discussion <b>Expanding Horizons</b>	Therapy Interactive ePoster Discussion <b>Brachytherapy Treatment and QA</b>	Therapy Interactive ePoster Discussion <b>Electron Treatment</b>		
<b>BREAK   3:00 PM – 3:30 PM • AAPM TOWN HALL: CONNECT WITH THE BOARD [ CO-HOSTS: M. SAIFUL HUQ, PHD, FAAPM, CHAIR OF THE BOARD AND JENNIFER LYNN JOHNSON, PHD, FAAPM, SECRETARY ]</b>								
<b>E</b> 3:30 PM – 4:30 PM	<b>SAM Professional Symposium Establishing Efficient and Effective Systems for Policy and Procedures</b> Moderator: M Bakhtiar Speakers: P Halvorsen, M Bakhtiar, K Moore	<b>SAM Imaging Education Course Non-anger Gamma Cameras: Physics, Quality Control and Evaluation</b> Moderator: W Erwin Speakers: P Slomka, L Zimmermann, M O'Connor	<b>SAM Imaging Scientific Symposium Imaging Markers of Breast Cancer Risk</b> Moderator: C Hruska Speakers: C. Vachon, E. Morris	<b>SAM Multi-Disciplinary Scientific Symposium State-of-the-art in MRI-guided Radiotherapy</b> Moderator: C Glide-Hurst Speakers: C Glide-Hurst, P Liu, D Ma, N Mickevicius, M Kim, M Boss	<b>Therapy Scientific Session Treatment Planning: Dose Calculation and Prediction</b> Moderators: X Qi, L Santanam	<b>Multi-Disciplinary Scientific Session Data Science, Radiomics and Computing</b> Moderators: Y Xiao, C Cardenas	<b>SAM Therapy Educational Course Radiation Biology for Radiation Therapy Physicists</b> Moderator: C Borras, C Orton Speakers: C Borras, C Orton, K Parodi, J Jin, J Deasy	<b>SAM Therapy Guided Tours Patient-Specific QA Devices/Software</b> Moderators: V Desai, S Thrower Speakers: V Desai, S Thrower, Y Lee-Bartlett, P Tobe, J Kunz
<b>F</b> 4:30 PM – 5:30 PM	<b>Professional Symposium Professional Economics Update Session</b> Moderators: J Fontenot, M Ferenci Speakers: J Fontenot, W Fuss		<b>Imaging Scientific Session Breast Imaging</b> Moderators: A Karellas, A Rubinstein		<b>Therapy Scientific Session Treatment Planning: Planning Automation and Assessment</b> Moderators: M Matuszak, L Conroy	<b>Multi-Disciplinary Scientific Session Real-time Tracking and Adaptive Radiation Therapy</b> Moderators: A Sawant, W Harris		
<b>lePD</b> 5:30 – 6:00 PM	Imaging Interactive ePoster Discussion <b>AI in Imaging</b>		Multi-Disciplinary Interactive ePoster Discussion <b>Imaging for Treatment Planning</b>		Therapy Interactive ePoster Discussion <b>FLASH Techniques</b>	Therapy Interactive ePoster Discussion <b>MR-guided RT Dosimetry and QA</b>		

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## PROGRAM AT A GLANCE | MONDAY, JULY 26

	TRACK 1	TRACK 2	TRACK 3	TRACK 4	TRACK 5	TRACK 6	TRACK 7	TRACK 8
<b>A</b> 10:30 AM – 11:30 AM	SAM Professional Symposium <b>An Introduction to LGBTQIA+ Issues in Radiation Oncology from the Medical Physicist's Perspective</b> Moderators: V Ainsworth, S Osterman Speakers: J Vadas, T Roth, V Ainsworth, S Osterman	SAM Imaging Educational Course <b>MR Protocol Basics: Brain, Spine and Prostate</b> Moderators: H Liu, T Andrews Speakers: P Hou, T Andrews, Q Yuan	SAM Imaging Educational Course <b>Biophotonics</b> Moderator: B Pogue Speakers: X Li, B Pogue	SAM Multi-Disciplinary Scientific Symposium <b>Frontiers in AI and Its Applications in Medical Physics</b> Moderator: L Xing Speakers: R Zeng, T Purdie, N Wen, L Xing	SAM Therapy Scientific Symposium <b>New Developments in Flash RT</b> Moderator: M Bazalova-Carter Speakers: S Krishnan, P Montay-gruel, M Kim, C Desrosiers, A Mascia	Multi-Disciplinary Scientific Session <b>Image-guided Surgery and Interventions</b> Moderators: R Wiersma, C Yu	Innovation in Medical Physics Education Moderator: L Genoese	Vendor Showcase #3 <b>Sun Nuclear</b> 10:30 AM – 11:00 AM  Break   11:00 - 11:30 AM
<b>B</b> 11:30 AM – 12:30 PM	SAM Professional Symposium <b>Who's Culpable? Moving Beyond Blame to Create a Just Culture and Avoid Burnout</b> Moderators: J Faught, E Kinsey Speakers: J Johnson, D Schofield	SAM Imaging Educational Course <b>Session in Memory of Edward "Ed" F. Jackson</b> Moderator: K Brock Speakers: J Hazle, R Golden, R Stafford, P Kinahan, J Prisciandaro	SAM Imaging Scientific Symposium <b>Biophotonics</b> Moderator: B Pogue Speakers: T Zhu, P La Riviere, B. Shabestari			Multi-Disciplinary Scientific Session <b>Quantitative Imaging</b> Moderators: Y Vinogradskiy, E Graves		Vendor Showcase #4 <b>RaySearch Laboratories AB</b> 11:30 AM – 12:00 PM  Break   12:00 PM – 12:30 PM
<b>lePD</b> 12:30 PM – 1:00 PM	Imaging Interactive ePoster Discussion <b>Rad/Fluoro Detectors, Acquisition, and Novel Systems</b>	Imaging Interactive ePoster Discussion <b>Dosimetry in CT/CBCT</b>	Multi-Disciplinary Interactive ePoster Discussion <b>MRI in Radiotherapy</b>		Therapy Interactive ePoster Discussion <b>External Beam: Automatic Treatment Planning</b>	Therapy Interactive ePoster Discussion <b>Outcome Modeling and Assessment I</b>		Vendor Showcase #5 <b>Siemens Healthineers</b> 12:30 PM – 1:00 PM
<b>BREAK   12:30 PM – 1:00 PM</b>								
<b>CD</b> 1:00 PM – 3:00 PM	President's Symposium <b>The Importance of Creativity in Science</b> Moderator: J Dobbins Speakers: J Dobbins, B Tromberg, T Mackie, M Giger, D Jaffray, N Ramanujam, R Jeraj, C Mistretta TRACK 1							
<b>lePD</b> 3:00 PM – 3:30 PM	Imaging Interactive ePoster Discussion <b>Rad/Fluoro Image Quality and Imaging Protocols</b>	Imaging Interactive ePoster Discussion <b>MRI Motion, Safety, Phantoms and More</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Image Guidance: Cone-beam CT</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Data Science/Radiomics</b>	Therapy Interactive ePoster Discussion <b>External Beam: Segmentation, Dose Calculation and Treatment Planning</b>	Therapy Interactive ePoster Discussion <b>External Beam: Segmentation, Dose Calculation and Treatment Planning</b>		Vendor Showcase #6 <b>VisionRT</b> 3:00 PM – 3:30 PM
<b>BREAK   3:00 PM – 3:30 PM</b>								
<b>E</b> 3:30 PM – 4:30 PM	SAM Professional Symposium <b>Formalizing Professionalism Education: Shared Experiences with Medical Physics Trainees</b> Moderators: I Vergalasova, H Al-Hallaq Speakers: I Vergalasova, J Wilson, M Price, J Hoisak	SAM Imaging Educational Course <b>Testing the Misfits: Tips and Tricks for Testing Your Least Favorite Diagnostic Imaging Equipment</b> Moderators: R Marsh, J Frimeth Speakers: N Bevins, J Gray, M Supanich, Z Lu, R Marsh, J Frimeth	SAM Imaging Educational Course <b>Accelerated Imaging in MR</b> Moderator: C Morrison Speakers: S Ragunathan, S Kurugol	<b>John R. Cameron Early-Career Investigator Symposium</b> Moderators: E Ritenour, M Podgorsak	SAM Therapy Educational Course <b>Overview of MRI Implementation in HDR Brachytherapy for Treatment of Gynecologic and Prostate Cancer</b> Moderator: M McKee Speakers: M McKee, F Mourtada, G Cohen	SAM Therapy Educational Course <b>Perspectives on Imaging Dose in IGRT</b> Moderators: G Ding, G Tang Speakers: P Alaei, G Ding	SAM Professional Symposium <b>Increasing the Contribution of Radiology and Imaging Physics to Global Health Initiatives</b> Moderators: A Rubinstein, J Weygand Speakers: E Medel Baez, C Morrison, D Mollura, C Borrás	Break   3:30 PM – 4:00 PM  Vendor Showcase #7 <b>MIM Software, Inc.</b> 4:00 PM – 4:30 PM
<b>F</b> 4:30 PM – 5:30 PM	History Symposium <b>Exploring the Foundation of Our Medical Physics Profession</b> Moderators: S Tabakov, G Ibbott Speakers: P Sprawls, J Van Dyk, J Battista		SAM Imaging Educational Course <b>MRI Homogeneity Testing</b> Moderator: J Och Speakers: J Och, C Brunnquell		SAM Therapy Educational Course <b>Report of TG 182: Electronic Intracavitary Brachytherapy Quality Management Based on Risk Analysis</b> Moderator: B Thomadsen Speakers: B Thomadsen, M Rivard, S Pillai	SAM Imaging Educational Course <b>Providing Value Beyond Accreditation and Compliance Testing: Imaging Physics</b> Moderator: T Szczykutowicz Speakers: C Brunnquell, C Bush, S Rose, A Bush	SAM Professional Symposium <b>Virtual Global Mentoring: Now More Than Ever</b> Moderators: J Van Dyk, R Jeraj Speakers: J Van Dyk, L Hirschhorn, B Goldberg, R Jeraj	Break   4:30 PM – 5:00 PM  Vendor Showcase #8 <b>IBA Dosimetry</b> 5:00 PM – 5:30 PM
<b>lePD</b> 5:30 – 6:00 PM	Imaging Interactive ePoster Discussion <b>Multimodality Imaging Topics</b>		Multi-Disciplinary Interactive ePoster Discussion <b>MRI in Radiation Therapy</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Deformable Image Registration</b>	Therapy Interactive ePoster Discussion <b>External Beam: Treatment Planning Optimization</b>	Therapy Interactive ePoster Discussion <b>Novel Dosimeters</b>		



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## PROGRAM AT A GLANCE | TUESDAY, JULY 27

	TRACK 1	TRACK 2	TRACK 3	TRACK 4	TRACK 5	TRACK 6	TRACK 7	TRACK 8
<b>A</b> 10:30 AM – 11:30 AM	SAM Professional Symposium <b>AAPM/IAEA Joint Professional Symposium: Ethics in Practice</b> Moderators: D van der Merwe, P Halvorsen Speakers: G White, G Loreti, C Skourou	Imaging Scientific Session <b>Radiography and Fluoroscopy</b> Moderators: B Schueler, B Loughran	SAM Imaging Scientific Symposium <b>Recent Advances in X-ray CT - from Ultra-high Resolution Imaging to AI Reconstruction</b> Moderator: W Zbijewski Speakers: J Boone, T Schmidt, E Hoffman, S Ravishankar	SAM Multi-Disciplinary Scientific Symposium <b>Functional Image-guided Targeting and Avoidance in Radiation Therapy</b> Moderators: A Sawant, M Matuszak Speakers: Y Vinogradskiy, M Matuszak, B Han, A Sawant	SAM Therapy Scientific Symposium <b>Radiation as a Biological Rather than a Physical Tool to Combat Cancer</b> Moderator: G Sawakuchi Speakers: A McNamara, J Eley, S Bright, W Ngwa	Therapy Scientific Session <b>Outcome Modeling and Assessment</b> Moderators: Y Kuang, M Huang	SAM Therapy Educational Course <b>HyTEC SBRT Dose Constraints</b> Moderator: J Grimm Speakers: J Grimm, E Yorke, A Mahadevan, A Jackson, L Marks	Vendor Showcase #9 <b>Radformation</b> 10:30 AM – 11:00 AM  Break   11:00 AM – 11:30 AM
<b>B</b> 11:30 AM – 12:30 PM	SAM Professional Symposium <b>Ethics Unwrapped: Ethics Case Studies</b> Moderator: N Bahar Speakers: N Bahar, A Riegel	Imaging Scientific Session <b>Multimodality, Optical, and Emerging Imaging Technologies</b> Moderators: Y Seo, D Osborne	Multi-Disciplinary Interactive ePoster Discussion <b>Innovative Technologies</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Research Tools and Databases</b>	Therapy Interactive ePoster Discussion <b>Particle Therapy Treatment Planning</b>	Multi-Disciplinary Scientific Session <b>Imaging for Particle Therapy</b> Moderators: L Dong, X Ding	SAM Therapy Educational Course <b>Adaptive SBRT for Liver and Pancreas Patients</b> Moderator: R Martin Speakers: R Martin, J Niedzielski, K Mittauer	Vendor Showcase #10 <b>Sun Nuclear Corporation</b> 11:30 AM – 12:00 PM  Break   12:00 PM – 12:30 PM
<b>lePD</b> 12:30 PM – 1:00 PM	Imaging Interactive ePoster Discussion <b>Phantoms and Simulations in Radiography and CT/CBCT</b>	Imaging Interactive ePoster Discussion <b>Rad/Fluoro Dosimetry and Safety</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Innovative Technologies</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Research Tools and Databases</b>	Therapy Interactive ePoster Discussion <b>Particle Therapy Treatment Planning</b>	Therapy Interactive ePoster Discussion <b>Patient Safety and Quality Improvement</b>		
BREAK   12:30 PM – 1:00 PM • AAPM TOWN HALL: CONNECT WITH THE BOARD [ CO-HOSTS: M. SAIFUL HUQ, PHD, FAAPM, CHAIR OF THE BOARD AND JENNIFER LYNN JOHNSON, PHD, FAAPM, SECRETARY ]								
<b>C</b> 1:00 PM – 2:00 PM	<b>MedPhys Slam</b> Moderators: M Gronberg, S Hernandez	SAM Imaging Educational Course <b>Nuclear Medicine Dosimetry in Imaging and Therapy</b> Moderator: S St. James Speakers: W Bolch, C Lawhn Heath, W Erwin, S St. James	Imaging Scientific Session <b>4D CT/CBCT and Sparse Acquisitions</b> Moderators: A Wang, Y Rong	Multi-Disciplinary Scientific Session <b>Biologically- and Functionally-Guided Radiation Therapy</b> Moderators: I Chetty, M Lawless	Therapy Scientific Symposium <b>Radiomics and Outcome Prediction</b> Moderator: F Yin Speakers: H Aerts, Y Xiao, F Yin, E Deutsch	Therapy Scientific Session <b>Radiobiology</b> Moderators: D Carlson, W Ngwa	SAM Therapy Educational Course <b>State of the Art (Non-MRI) Motion Management for External Radiotherapy</b> Moderator: J Smilowitz Speakers: T McCaw, E Colvill, G Mageras, X Li	SAM Partners in Solutions Imaging <b>Imaging: Artificial Intelligence in Medical Imaging</b> Moderators: C Schaeffer, S Leon Speakers: C Schaeffer, S Leon, N Mistry, J Vaishnav, R Bammer, A Dresner
<b>D</b> 2:00 PM – 3:00 PM		Imaging Scientific Session <b>AI in CT and CBCT: Image Enhancement and Synthesis</b> Moderators: S Leng, G Gang	Multi-Disciplinary Scientific Symposium <b>The Anne and Donald Herbert Distinguished Lectureship in Modern Statistical Modeling</b> Moderator: I Sechopoulos Speaker: N Obuchowski	Therapy Scientific Session <b>Radiobiology and Preclinical Systems</b> Moderators: Y Poirier, M Bazalova-Carter				
<b>lePD</b> 3:00 PM – 3:30 PM	Imaging Interactive ePoster Discussion <b>CT Artifacts, Reconstruction, and Imaging Performance Assessment</b>		Multi-Disciplinary Interactive ePoster Discussion <b>Adaptive Radiation Therapy</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Segmentation II</b>	Therapy Interactive ePoster Discussion <b>Particle Therapy Verification</b>	Therapy Interactive ePoster Discussion <b>Pre-Clinical</b>		
BREAK   3:00 PM – 3:30 PM								
<b>E</b> 3:30 PM – 4:30 PM	SAM Professional Symposium <b>Overview of Equity, Diversity and Inclusion (EDI) Efforts in AAPM</b> Moderators: L Cervino, S Avery Speakers: B Gittens, J Pollard-Larkin	SAM Imaging Educational Course <b>Breast Imaging 1: Current State of the Art</b> Moderator: I Reiser Speakers: R Zuley, R Mann, K Little, C Hruska, T Hall	SAM Imaging Scientific Symposium <b>Quantitative SPECT for Radionuclide and External Beam Treatment Planning</b> Moderator: S Kappadath Speakers: J Dickson, S Kappadath	<b>Science Council Session: Innovative Technologies to Advance Diagnosis and Treatment</b> Moderators: J Seuntjens, Z Lu	Therapy Scientific Session <b>FLASH: Radiobiology</b> Moderators: P Montay-gruel, J Schuemann	Multi-Disciplinary Scientific Session <b>AI-Based Auto-Segmentation and Auto Contouring - I</b> Moderators: L Ren, H Veeraraghavan	SAM Therapy Scientific Symposium <b>Joint AAPM-EFOMP Symposium: Non-conventional Treatment in Radiation Therapy</b> Moderator: Y Prezado Speakers: R Timmerman, Y Prezado, S Chang, K Sheng	SAM Partners in Solutions Therapy <b>Therapy: Adaptive Therapy AI Software Delivery Systems</b> Moderators: L Conroy, D Schofield Speakers: L Conroy, A Yock, D Casey, D Ly
<b>F</b> 4:30 PM – 5:30 PM	Professional Symposium <b>New Members Symposium</b> Moderators: K Mittauer, S Grzetic Speakers: J Dobbins, F Fahey, J Prisciandaro, J Palta, B Parker, J Seuntjens		Imaging Scientific Session <b>New Technologies and Image Reconstruction in CT and CBCT</b> Moderators: J Stayman, A Tao		Therapy Scientific Session <b>FLASH: Treatment Planning, Delivery, and Verification</b> Moderators: E Diffenderfer, S Mossahebi	Multi-Disciplinary Scientific Session <b>AI-Based Auto-Segmentation and Auto Contouring - II</b> Moderators: K Brock, D Ruan		
AAPM AWARDS CEREMONY   6:00 PM – 8:00 PM								

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CREATIVE SCIENCE. ADVANCING MEDICINE.

## PROGRAM AT A GLANCE | WEDNESDAY, JULY 28

	TRACK 1	TRACK 2	TRACK 3	TRACK 4	TRACK 5	TRACK 6	TRACK 7	TRACK 8
<b>A</b> 10:30 AM – 11:30 AM	SAM Professional Symposium <b>Building and Mentoring Diverse Teams to Achieve Equity, Diversity, Inclusion and Greater Success</b> Moderators: J Hoisak, G Aldosary Speakers: T Juang, A Johnson, M Siker	SAM Imaging Educational Course <b>Principles and Applications of Multienergy CT: Report of AAPM Task Group 291</b> Moderator: C McCollough Speakers: C McCollough, T Flohr, X Duan	SAM Imaging Scientific Symposium <b>Robotic X-ray Systems: Emerging Platform for Improved Radiography, 3D Imaging, and Interventional Radiology</b> Moderator: T Reynolds Speakers: T Reynolds, G Gang, F Noo, L Ritschl	SAM Multi-Disciplinary Scientific Symposium <b>AI in Image Guided Radiation Therapy</b> Moderator: X Yang Speakers: G Chen, L Ren, X Yang, D Nguyen	Multi-Disciplinary Scientific Symposium <b>Grand Challenges: Deep Learning Sparse-View CT and DBTex</b> Moderator: S Armato Speakers: X Pan, E Sidky, M Mazurowski	Therapy Scientific Session <b>Particle Therapy: Treatment Planning and Radiobiology</b> Moderators: S Flampouri, J Eley	Ultrasound Symposium <b>Ultrasound QA/QC Workshop</b> Moderator: Z Lu Speakers: Z Long, M Holland, J Zagzebski, I Rosado-Mendez, S Dekker	Vendor Showcase #11 <b>Sun Nuclear Corporation</b> 10:30 AM – 11:00 AM Break   11:00 AM – 11:30 AM
<b>B</b> 11:30 AM – 12:30 PM	SAM Professional Symposium <b>MPLA Career Development: Secrets to Your Success</b> Moderators: J Saini, P Taylor Speakers: I Barreto, J Johnson, A Schreuder, K Kanal, M Howard, E Angel				SAM Therapy Educational Course <b>TG-302 Surface Image Guided Radiotherapy (SGRT): Prevalence and Clinical Applications</b> Moderator: H Al-Hallaq Speakers: H Al-Hallaq, T Pawlicki, L Padilla, L Cervino	Therapy Scientific Session <b>Particle Therapy: Treatment Delivery and Verification</b> Moderators: H Paganetti, M Zhu	Ultrasound Symposium <b>Ultrasound Image Guidance for Interventions</b> Moderator: D Fontanarosa Speakers: E Harris, S Camps, M Antico	Vendor Showcase #12 <b>MIM Software, Inc.</b> 11:30 AM – 12:00 PM Break   12:00 PM – 12:30 PM
<b>lePD</b> 12:30 PM – 1:00 PM	Imaging Interactive ePoster Discussion <b>CBCT Acquisition and Reconstruction</b>	Imaging Interactive ePoster Discussion <b>Nuclear Medicine, PET</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Biologically and Functionally-Guided Radiation Therapy</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Imaging for Particle Therapy</b>	Therapy Interactive ePoster Discussion <b>Particle Therapy: Biological Effect and Modeling</b>	Therapy Interactive ePoster Discussion <b>Quality Assurance</b>		Vendor Showcase #13 <b>Elekta</b> 12:30 PM – 1:00 PM
<b>BREAK   12:30 PM – 1:00 PM</b>								
<b>C</b> 1:00 PM – 2:00 PM	Professional Symposium <b>Personal Finance for Medical Physicists</b> Moderators: M Mahesh, J Pollard-Larkin Speakers: M Mahesh, J Harper	SAM Imaging Educational Course <b>ACR Activities and Updates</b> Moderator: D Gress Speakers: D Gress, W Geiser, B Harkness, D Reeve, G Clarke, E Amei	Therapy Scientific Session <b>Quality Assurance</b> Moderators: S Chen, J O'Daniel	Ultrasound Symposium <b>Carson-Zagzebski Distinguished Lectureship on Medical Ultrasound</b> Moderators: T Liu, C Diederich Speaker: E Konofagou	SAM Therapy Scientific Symposium <b>Advances in Proton Therapy</b> Moderators: T Bortfeld, W Liu Speakers: W Liu, A Knopf, J Langendijk, J Unkelbach, S Yan	Multi-Disciplinary Scientific Session <b>MRI for Adaptive Treatment Planning and Delivery</b> Moderators: Z Fan, V Yu	SAM Therapy Educational Course <b>Artificial Intelligence in the Clinic – Is It Going to Help Or Hurt Our Productivity?</b> Moderator: E Schreibmann Speakers: C Cardenas, Y Yang, A Apte, K Moore, D Ruan	Break   1:00 PM – 1:30 PM Vendor Showcase #14 <b>Radiological Imaging Technology, Inc.</b> 1:30 PM – 2:00 PM
<b>D</b> 2:00 PM – 3:00 PM	Therapy Scientific Session <b>Quality Control in Treatment Planning and Delivery</b> Moderators: X Gu, S Dieterich		Imaging Scientific Session <b>Dose and Imaging Performance Assessment in CT and CBCT</b> Moderators: J Cammin, C Coolens	Ultrasound Symposium <b>Mechanical Tissue Disruption with Focused Ultrasound</b> Moderators: A Payne, K Bader Speakers: T Khokhlova, A Maxwell, K Bader		Multi-Disciplinary Scientific Session <b>Autosegmentation and Image Analysis in MRI-guided Radiation Therapy</b> Moderators: C Glide-Hurst, S Nejad-Davarani		Break   2:00 PM – 3:00 PM
<b>lePD</b> 3:00 PM – 3:30 PM	Imaging Interactive ePoster Discussion <b>CBCT Artifacts</b>	Imaging Interactive ePoster Discussion <b>MRI Image Analysis, Biomarkers, and Radiomics</b>	Multi-Disciplinary Interactive ePoster Discussion <b>MR-guided Adaptive Radiation Therapy</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Image-Guided Treatment Response Assessment</b>	Therapy Interactive ePoster Discussion <b>Radiation Dosimetry</b>	Therapy Interactive ePoster Discussion <b>Radiobiology and Modeling</b>		Vendor Showcase #15 <b>Reflexion</b> 3:00 PM – 3:30 PM
<b>BREAK   3:00 PM – 3:30 PM</b>								
<b>E</b> 3:30 PM – 4:30 PM	Professional Proffered Session <b>Medical Physics Practice Changes in Response to the Covid-19 Pandemic</b> Moderator: B Parker	SAM Imaging Educational Course <b>Updates on CT Dosimetry</b> Moderator: M Supanich Speakers: A Hernandez, M Bostani, I Barreto, M Supanich	Ultrasound Symposium <b>Frontiers of Ultrasound Imaging</b> Moderators: I Rosado-Mendez, M Muller Speakers: G Cloutier, J Bamber, M Muller	Therapy Educational Course <b>In Memoriam of John "Jack" Cunningham</b> Moderators: J Van Dyk, J Battista Speakers: J Van Dyk, J Battista, D Rogers, A Ahnesjo, T Mackie	SAM Therapy Scientific Symposium <b>Cardiac Radioablation: How Medical Physicists Can Shape the Future?</b> Moderator: P Keall Speakers: M De Riva Silva, S Lydiard, A Deisher	Therapy Scientific Session <b>Brachytherapy</b> Moderators: M Guerrero, J Miller	SAM Therapy Educational Course <b>The Evolving Paradigm of Patient Specific QA</b> Moderator: S Lim Speakers: J Adamson, S Lim, B McCurdy, C Bojchko, J Andreozzi	Break   3:30 PM – 4:00 PM Vendor Showcase #16 <b>Radformation</b> 4:00 PM – 4:30 PM
<b>F</b> 4:30 PM – 5:30 PM	Professional Symposium <b>21 Years into the 21st Century: Modern Scientific Publishing in Medical Physics and the JACMP</b> Moderators: J Boone, M Mills Speakers: M Mill, A Cetnar, J Boone, S Benedict		Ultrasound Scientific Session <b>Quantitative Ultrasound and Emergent Imaging Technology (II)</b> Moderators: I Rosado-Mendez, M Muller		SAM Therapy Scientific Symposium <b>Brachytherapy Technology Horizon</b> Moderators: X Jian, W Song Speakers: X Jia, W Song, Å Carlsson Tedgren, J Robar	Multi-Disciplinary Scientific Session <b>Image-Guided Treatment Response Modeling and Assessment</b> Moderators: J Wang, N Tyagi		Break   4:30 PM – 5:00 PM Vendor Show Case Slot 17 <b>LAP Laser, LLC</b> 5:00 PM – 5:30 PM
<b>lePD</b> 5:30 PM – 6:00 PM	Ultrasound Interactive ePoster Discussion <b>Ultrasound</b>	Imaging Interactive ePoster Discussion <b>Dose and Image Quality in CT and X-ray Imaging</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Novel and Emerging Imaging Technologies in Radiation Therapy</b>		Therapy Interactive ePoster Discussion <b>SBRT/SRS Treatment Planning</b>	Therapy Interactive ePoster Discussion <b>Treatment Accuracy</b>		



# KEY

- Imaging Education
- Imaging Scientific
- Therapy Education
- Therapy Scientific
- Multi-Disciplinary Scientific
- Professional
- Ultrasound
- Exhibition
- President's Sessions of Note

## PROGRAM AT A GLANCE | THURSDAY, JULY 29

	TRACK 1	TRACK 2	TRACK 3	TRACK 4	TRACK 5	TRACK 6	TRACK 7	TRACK 8
<b>A</b> 10:30 AM – 11:30 AM	SAM Professional Symposium <b>"Picture a Scientist": Toward Gender Equity</b> Moderator: K Hendrickson Speaker: K Paradis (Younge)	SAM Imaging Educational Course <b>Breast Imaging 2: Possible Future Directions</b> Moderator: D Zhang Speakers: J Phillips, R Nosrati, P Ghazi, K Yang	SAM Imaging Scientific Symposium <b>Going High or Going Low: MRI at Unconventional Field Strengths</b> Moderator: A Fagan Speakers: M Rosen, A Campbell-Washburn, A Fagan, S Mukundan	SAM Multi-Disciplinary Scientific Symposium <b>Task-based Image Quality Optimization and Assessment in Diagnostic Imaging and Radiation Therapy</b> Moderator: H Li Speakers: C Abbey, M Anastasio, M Kupinski	SAM Therapy Scientific Symposium <b>Adaptive Radiation Therapy in the Era of Big Data with Artificial Intelligence</b> Moderator: X Qi Speakers: X Qi, X Gu, Y Wang, S Bentzen, X Li, I El Naqa	Therapy Scientific Session <b>Machine QA</b> Moderators: E Ford, J Pollard-Larkin	SAM Therapy Educational Course <b>Hands-on Workshop: Simulated Error Training for the Physics Plan Review</b> Moderator: P Johnson Speakers: L Schubert, P Johnson, G Kim, J Faught	
<b>B</b> 11:30 AM – 12:30 PM	SAM Professional Symposium <b>Standardization and Workflow Management in Larger Multi-site Radiation Oncology Practice: Challenges and Solutions</b> Moderators: R Boopathy, M Heard Speakers: R Boopathy, J Tanyi, G Niyazov, C Nelson					Multi-Disciplinary Scientific Session <b>Real-Time Tracking</b> Moderators: R Berbeco, J Booth		Break   11:30 AM – 12:00 PM  Vendor Showcase #18 <b>LAP Laser, LLC</b> 12:00 PM – 12:30 PM
<b>lePD</b> 12:30 PM – 1:00 PM	Imaging Interactive ePoster Discussion <b>Spectral and Dual Energy CT/CBCT</b>	Imaging Interactive ePoster Discussion <b>MRI Quantitative Imaging and Applications</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Imaging for Motion Management</b>		Therapy Interactive ePoster Discussion <b>Treatment Delivery</b>			
<b>BREAK   12:30 PM – 1:00 PM</b>								
<b>C</b> 1:00 PM – 2:00 PM	SAM Professional Symposium <b>A Penny for Your Thoughts: Survey Science for Medical Physicists</b> Moderators: K Hendrickson, J Johnson Speakers: L Schubert, C Buckley, R Ivie	SAM Imaging Educational Course <b>Effective Dose and Patient Dose</b> Moderator: M Rehani Speakers: M Rehani, C Martin, E Samei	Imaging Scientific Session <b>MRI</b> Moderators: F Pineda, Y Shu	SAM Multi-Disciplinary Scientific Symposium <b>Novel Algorithms for High-quality Diagnostic and On-board Cone-Beam CT</b> Moderator: A Sisniega Speakers: A Sisniega, M Kachelrieß, A Wang, Y Rong	Therapy Scientific Session <b>Novel Treatment Delivery and Verification Techniques I</b> Moderators: R Howell, S O'Reilly	Multi-Disciplinary Scientific Session <b>Novel and Emerging Imaging Technologies in Radiation Therapy</b> Moderators: K Sheng, C Altunbas	SAM Therapy Educational Course <b>Not for the Faint of Heart: Functional Radiosurgery</b> Moderator: D Schlesinger Speakers: S Braunstein, G Kim, D Schlesinger	SAM Partners in Solutions Therapy <b>Therapy: Adaptive Therapy AI Software Planning Systems</b> Moderators: D Schofield, N Brown Speakers: D Schofield, N Dwivedi, A Schulte, N Dogan, L Schulte
<b>D</b> 2:00 PM – 3:00 PM	Professional Symposium <b>Medical Physics Workforce Update</b> Moderators: W Newhauser, E Chen, M Mills Speakers: E Chen, W Newhauser, D Gress	SAM Imaging Educational Course <b>CT Protocol Development and Management</b> Moderator: M Jacobsen Speakers: K Little, T Szczykutowicz, M Jacobsen	Imaging Scientific Session <b>AI in Imaging</b> Moderators: M Giger, M McNitt-Gray		Therapy Scientific Session <b>Novel Treatment Delivery and Verification Techniques II</b> Moderators: G Hugo, L Cervino	Therapy Scientific Session <b>Deep Learning in Treatment Planning</b> Moderators: X Jia, Q Wu	SAM Therapy Educational Course <b>Gamma Knife QA Update with TG -178</b> Moderator: N Knutson Speakers: S Goetsch, P Alvarez, N Knutson	
<b>lePD</b> 3:00 PM – 3:30 PM	Imaging Interactive ePoster Discussion <b>CT Image Quality, Protocol Optimization, and Dose Reduction</b>	Imaging Interactive ePoster Discussion <b>MRI Physics and QC</b>	Multi-Disciplinary Interactive ePoster Discussion <b>Segmentation III</b>		Therapy Interactive ePoster Discussion <b>Treatment Verification</b>			
<b>BREAK   3:00 PM – 3:30 PM</b>								
<b>E</b> 3:30 PM – 4:30 PM	SAM Professional Symposium <b>Professional Letters of Reference: Advice for Those Who Need Them and Those Who Need To Write Them</b> Moderators: C Page-Robertson, R Miller Speakers: R Miller, T Pawlicki	Multi-Disciplinary Scientific Symposium <b>Principal Investigator Scientific Highlights</b> Moderators: C Glide-Hurst, L Ren Speakers: C Glide-Hurst, G Prax, H Li, K Lafata, L Ren, W Yang, N Wen, K Brock, C Hruska, E Samei, H Paganetti	Imaging Scientific Session <b>Dual Energy and Spectral CT and CBCT</b> Moderators: E Gingold, T Schmidt	Multi-Disciplinary Scientific Session <b>AI Applications in Image Guided Adaptive Radiation Therapy</b> Moderators: X Yang, W Yang	Therapy Scientific Session <b>Radiation Dose Calculation Algorithms</b> Moderators: A Faught, Z Tian	Therapy Scientific Session <b>SRS/SBRT: Segmentation, Dose Calculation, and Treatment Planning</b> Moderators: A Modiri, P Hill	SAM Therapy Educational Course <b>Advances in Tomotherapy Treatment and QA - New Guidelines from TG 306</b> Moderators: Q Chen, Y Rong Speakers: J Smilowitz, Q Chen, X Qi, J Burmeister	Partners in Solutions Imaging <b>Imaging: Artificial intelligence in Medical Imaging</b> Moderators: Y Liu, T Crawford Speakers: Y Liu, T Crawford, R Jones, B Nett
<b>F</b> 4:30 PM – 5:30 PM	SAM Professional Symposium <b>Expanding the Scope of the Medical Physics Profession: Developing and Examining Patient-Facing Roles and Responsibilities</b> Moderator: T Atwood Speakers: T Atwood, J Burmeister, S Geneser, D Brown		Therapy Scientific Session <b>Radiation Dose Evaluation and Verification</b> Moderators: L Xiang, C Grassberger	Multi-Disciplinary Scientific Session <b>Novel Strategies Using Existing Imaging Technology for Planning, Delivery and Toxicity Analyses</b> Moderators: I El Naqa, D Pafundi	Multi-Disciplinary Scientific Session <b>Translational Technologies and Techniques</b> Moderators: F Yin, T Reynolds	Therapy Scientific Session <b>SRS/SBRT: Treatment Delivery and Verification</b> Moderators: Z Labby, E Covington	SAM Therapy Educational Course <b>Using Automation to Improve Linac-based VMAT for Total Body Irradiation (TBI)</b> Moderator: P Xia Speakers: B Guo, N Kovalchuk, X Gu	
<b>CLOSE OF MEETING</b> SEE YOU NEXT YEAR IN WASHINGTON, DC   JULY 10-14, 2022								