

- MO-FF-A2-4** **Pulsed Reduced Dose-Rate Radiotherapy On a Helical Tomotherapy Unit** - Y Rong^{1,2} *, S Howard² , B Paliwal² , J Welsh^{1,2} , (1) University of Wisconsin-Madison, Riverview Cancer Center , Wisconsin Rapids, WI, (2) University of Wisconsin-Madison, Madison, WI,
- SU-DD-A1-4** **TomoTherapy Dose Painting** - W Lu¹ * , M Chen¹ , K Ruchala¹ , G Olivera^{1,2} , (1) TomoTherapy, Inc., Madison, WI, (2) University of Wisconsin-Madison
- SU-FF-J-24** **Functional Planning for Tomotherapy-Based Stereotactic Body Radiotherapy (SBRT) for Peripheral Lung Tumors** - J Cai*, R McLawhorn, P Read, J Larner, K Sheng, T Altes, E de Lange, S Benedict, University of Virginia , Charlottesville, VA,
- SU-FF-J-85** **Evaluation of the Positioning Accuracy in Helical Tomotherapy for Stereotactic Intracranial Radiosurgery** - N Papalia¹ * , M Lamba² , B McGill³ , H Elson⁴ , (1) University of Cincinnati, Cincinnati, OH, (2) University of Cincinnati, Cincinnati, OH, (3) Precision Radiotherapy, Hamilton, OH, (4) University of Cincinnati, Cincinnati, OH
- SU-FF-T-86** **The Effect of Set-Up Errors On the Final Target Dose Distribution in Step-And-Shoot IMRT Plans Compared to Helical Tomotherapy Plans.** - V Sarkar¹ * , C Shi¹ , N Papanikolaou¹ , (1) Cancer Therapy and Research Center at the University of Texas Health Science Center at San Antonio, San Antonio, TX
- SU-FF-T-87** **Dose Reconstruction of Intracranial Hypofractionated Helical Tomotherapy Treatments for Adaptive Planning** - N Sheth * , C Yang, S Murphy , M Weiss , S Sim, Monmouth Medical Center, Long Branch, NJ
- SU-FF-T-91** **Initial Dosimetric Experience with Mega Voltage Computed Tomography (MVCT) Detectors and Estimation of Pre and Post-Repair Dosimetric Parameters of a First Helical Hi-Art II Tomotherapy Machine in India** - R Kinhikar¹ , C Tambe¹ , D Dhote² , D Deshpande¹ , (1) Tata Memorial Centre, Mumbai, Maharashtra, IN, (2) Brijlal Biyani Science College, Amravati, Maharashtra, IN,

- SU-FF-T-97** **Dosimetric Comparison of Whole-Breast Irradiation Techniques: Supine Versus Prone Positions Using Helical Tomotherapy** - Y Wang^{1,2}*, S Chang^{1,2}, W Chen^{1,2}, (1) Northeast Radiation Oncology Center, Dunmore, PA, (2) ICT Radiotherapy Services, Livingston, NJ
- SU-FF-T-108** **Evaluation of IMRT Plans Between Linac and Helical Tomotherapy Based On Dose Volume Indices and Normal Tissue Sparing in Prostate Cancer Patients** - P Sharma*, V Murthy, Z Master, Reena Ph, S Patkar, S chaudhari, R Kinhikar U Mahantshetty, R Engineer, D Deshpande, S Shrivastava Tata Memorial Centre, Mumbai, Maharashtra, India
- SU-FF-T-115** **Dosimetric Comparison of Helical Tomotherapy with Conventional Techniques for Simultaneous Irradiation of Prone Breast and Regional Lymph Nodes** - K Kainz*, J White, G Chen, X Li, Medical College of Wisconsin, Milwaukee, WI
- SU-FF-T-117** **Dosimetric Impact of Bladder Contrast On Prostate Helical Tomotherapy Treatments** - L Schubert*, D Westerly, W Tome, B Paliwal, University of Wisconsin, Madison, WI
- SU-FF-T-121** **Dosimetric Comparison Between Intensity-Modulated Arc Therapy and Helical Tomotherapy Plans for Simultaneous Boost Treatment of Esophageal Cancer** - C Han¹*, Y Chen¹, A Liu¹, T Schultheiss¹, J Wong¹, (1) City of Hope National Medical Center, Duarte, CA
- SU-FF-T-123** **Comparison of Elekta VMAT with Tomotherapy: Plan Quality, Delivery Efficiency and Accuracy** - M Rao¹*, W Yang², K Sheng², F Chen¹, J Ye¹, V Mehta¹, D Shepard¹, D Cao¹, (1) Swedish Cancer Institute, Seattle, WA, (2) University of Virginia, Charlottesville, VA
- SU-FF-T-139** **Dosimetric Accuracy of Low Dose Region (V5-V10) in TomoTherapy Planning of Lung IMRT** - S Krafft¹*, S Jang², R Hamilton², C Watchman², (1) Department of Physics, University of Arizona, Tucson, AZ, (2) Department of Radiation Oncology, University of Arizona, Tucson, AZ
- SU-FF-T-171** **Arc Therapy Comparison of TomoTherapy, RapidArc**

- and Dynamic Conformal Arc** - M Schell¹ *, R Abu-Aita¹, M Rajecki², A Philip¹, R Meiler¹, D Rosenzweig¹, D Clark¹, L Constine¹, A Katz¹, P Okunieff¹, M Milano¹ (1) Univ Rochester Medical Center, Rochester, NY, (2) Cheektowaga, NY,
- SU-FF-T-180** **Tomotherapy Dose Painting Delivery Robust to Respiratory Motion** - M Kissick¹ *, X Mo¹, D Westerly¹, R Flynn², S Bowen¹, L Schubert¹, R Jeraj¹, T Mackie¹, (1) University of Wisconsin, Madison, WI (2) University of Iowa Hospitals and Clinics, Iowa City, IA
- SU-FF-T-183** **Helical Tomotherapy Treatment Plan Optimization for Superficial Chest Wall Irradiation Incorporating Intrafractional Motion** - M Moldovan¹ *, J Gibbons^{1,2}, C Chu¹, B Parker^{1,2}, (1) Mary Bird Perkins Cancer Center, Baton Rouge, LA, (2) Louisiana State University, Baton Rouge, LA
- SU-FF-T-189** **Skin-Sparing Technique for Breast Cancer Treatments Using Tomotherapy** - O Pechenaya¹ *, S Goddu¹, M Michaletz-Lorenz¹, (1) Washington University School of Medicine, St Louis, MO
- SU-FF-T-200** **Independent MU Calculation for Pre-Treatment Verification of TomoTherapy StatRT** - B Nyiri, L Gerig, Ottawa Hospital Regional Cancer Centre, Ottawa, ON, CA,
- SU-FF-T-208** **Dose Verification for Total Marrow Irradiation Using HELICAL TOMOTHERAPY Planned Adaptive** - X Zhang *, J Penagaricano, K Boyd, Y Yan, P Corry, V Ratanatharathorn, E Moros, University of Arkansas for Medical Science, Little Rock, AR
- SU-FF-T-209** **Implementation of 2D Arrays for TomoTherapy Patient-Specific QA** - T Winningham¹ *, R Staton¹, S Meeks¹, (1) MD Anderson Cancer Center Orlando, Orlando, FL
- SU-FF-T-229** **Evaluation of a Beam Model Applicable to Small Fields in TomoTherapy Delivered Dose Distributions** - P Caprile *, G H Hartmann, German Cancer Research Center, Heidelberg, Germany
- SU-FF-T-248** **Quality Assurance for Total Marrow Irradiation (TMI) Using Helical Tomotherapy** - X Zhang *, J Penagaricano, Y Yan, S Hancock,

V Ratanatharathorn, P Corry, E Moros, University of Arkansas for Medical Science, Little Rock, AR

- SU-FF-T-250** **Impact of Pulse Forming Network (PFN) and Injection Current (IC) Parameters On Output and Energy Variations of Helical TomoTherapy** - C Shi^{1*}, A Gutiérrez¹, Y Liu¹, Y Zhai¹, N Papanikolaou¹, (1) Cancer Therapy & Research Center at University of Texas HSC SA, San Antonio, TX
- SU-FF-T-251** **Sinogram-Based Quality Assurance for Twinned Tomotherapy Machines** - S Oddiraju^{1*}, O Pechenaya¹, D Rangaraj¹, S Goddu¹, S Yaddanapudi¹, D Yang¹, (1) Washington University School of Medicine, St. Louis, MO
- SU-FF-T-291** **Verification of In-Vivo Dosimetry in TomoTherapy Treatments** - Q Chen^{1*}, W Lu¹, E Schnarr¹, K Ruchala¹, G Olivera^{1,2}, (1) TomoTherapy Inc., Madison, WI, (2) Medical Physics, University of Wisconsin-Madison, Madison, WI
- SU-FF-T-305** **The Use of TomoDose for TomoTherapy MLC Alignment Verification** - T Bichay*, Chen, Saint Mary's Health Care, Grand Rapids, MI
- SU-FF-T-342** **Evaluation of Superficial Dose for Helical Tomotherapy with GAFCHROMIC® EBT Film** - H Lee¹, N Chong^{1,2}, H Tien^{1,2}, C Lin^{*1}, H Yen¹, P Shueng^{1,5}, L Wu¹, C Hsieh^{1,3}, C Chen^{1,4}, (1) Far Eastern Memorial Hospital, Taipei, TW, (2) Department of Biomedical Imaging and Radiological Sciences, Taipei, TW, (3) Institute of Traditional Medicine, School of Medicine, National Yang-Ming University, Taipei, TW, (4) Graduate Institute of Clinical Medical Sciences, Chang Gung University, Taipei, TW, (5) Department of Radiation Oncology, National Defense Medical Center, Taipei, TW
- SU-FF-T-343** **Analysis of Chest Wall In-Vivo Dosimetry for Post Mastectomy Radiotherapy Using Helical TomoTherapy** - S Ito^{1*}, B Parker^{1,2}, J Gibbons^{1,2}, R Levine², K Hogstrom^{1,2}, (1) Louisiana State University, Baton Rouge, LA, (2) Mary Bird Perkins Cancer Center, Baton Rouge, LA
- SU-FF-T-358** **Evaluation of the Delta4™ 3D Cylindrical Phantom for Delivery Quality Assurance of Stereotactic Body**

- Radiotherapy (SBRT) Treatments Using Helical Tomotherapy** - A Gutiérrez^{1*}, O Calvo¹, S Stathakis¹, N Papanikolaou¹, (1) University of Texas Health Science Center, San Antonio, TX
- SU-FF-T-407** **Full Monte Carlo Computation of K Correction Factors Calculated in Tomotherapy Static and Helical Deliveries for Future Ion Chamber Reference Dosimetry Protocols of Non Standard Beams** - E Sterpin^{1*}, T Mackie², W Lu³, G Olivera³, S Vynckier¹, (1) Cliniques universitaires Saint-Luc, Brussels, Brussels, BE, (2) University of Wisconsin - ADCL, Madison, WI, (3) TomoTherapy, Inc., Madison, WI
- SU-FF-T-503** **Biological Effect of Different IMRT Delivery Techniques: SMLC, DMLC and Helical TomoTherapy®** - M Shaikh^{1*}, B Zhao¹, J Burmeister², Q Liu², S Pandya², M Joiner², (1) Wayne State University School of Medicine, Detroit, MI, (2) Karmanos Cancer Institute, Detroit, MI
- SU-FF-T-508** **Utilizing Radiobiological Measures and Planned Adaptive Software to Evaluate Adaptive Tomotherapy Plans for Lung Cancer Patients** - F Su^{1,2*}, C Shi^{1,2}, P Mavroidis^{3,4}, N Papanikolaou^{1,2}, (1) Radiation Oncology Department, Cancer Therapy and Research Center, San Antonio, TX, USA, (2) Division of Radiological Sciences, University of Texas Health Science Center at San Antonio, San Antonio, TX, USA, (3) Department of Medical Radiation Physics, Karolinska Institute and Stockholm University, Stockholm, Sweden, (4) Department of Medical Physics, Larissa University Hospital, Larissa, Greece.
- SU-FF-T-510** **Comparison of Helical Tomotherapy, MLC-Based IMRT, and 3D-Conformal Radiation Modalities in BEUD Utilization and Analysis** - S Rodriguez^{1*}, F Su¹, C Shi¹, S Stathakis¹, A Gutiérrez¹, C Esquivel¹, P Mavroidis², N Papanikolaou¹, (1) CTRC @ UTHSCSA, San Antonio, Texas, (2) Karolinska Institutet and Stockholm University, Stockholm, SE
- SU-FF-T-531** **An Efficient Planning Technique for Tomotherapy Based Stereotactic Radiosurgery** - E Soisson^{1*}, P Hoban², T Kammeyer², A Basavatia¹, D Westerly¹,

W Tome¹ , (1) University of Wisconsin, Madison, WI,
(2) TomoTherapy, Inc., Madison, WI

- SU-FF-T-579** **Comparison of Helical Tomotherapy and Mixed Beam Treatment Plans for Superficial Parotid Cancers** - O Blasi^{1*} , J Fontenot^{1,2} , J Gibbons^{1,2} , K Hogstrom^{1,2} , (1) Louisiana State University, Baton Rouge, LA, (2) Mary Bird Perkins Cancer Center, Baton Rouge, LA
- SU-FF-T-582** **Delivery Angle Dependency On Treatment Plan Quality for Whole Breast Radiotherapy Using Helical Tomotherapy** - P Myers^{1*} , L Weber¹ , A Gutiérrez¹ , N Papanikolaou¹ , (1) University of Texas Health Science Center at San Antonio, San Antonio, TX
- SU-FF-T-583** **Integral Dose Variation in Three-Dimensional Conformal Radiotherapy, Intensity-Modulated Radiotherapy, and Helical Tomotherapy** - R Yang^{1*} , J Wang² , S Xu³ , (1) Peking University Third Hospital, Beijing, , CN, (2) Peking University Third Hospital, Beijing, , CN, (3) General Hospital of the People's Liberation Army
- SU-FF-T-590** **Treatment Planning Study of Epithelial Ovarian Cancers Using Helical Tomotherapy** - j swamidas¹ , D Deshpande^{2*} , U Mahantshetty³ , V Goel⁴ , R Engineer⁵ , S Shrivastava⁶ , (1) , , (2) Tata Memorial Hospital, Mumbai, Maharashtra, IN, (3) Tata Memorial Hospital, Mumbai, Maharashtra, IN, (4) Advanced center of training reserach and education in cancer , Mumbai, Maharashtra, IN, (5) Tata Memorial Hospital, Mumbai, Maharashtra, IN, (6) Tata Memorial Hospital, Mumbai, Maharashtra, IN
- SU-FF-T-596** **Dosimetric Impact of Anatomic Changes Due to Patient Weight Loss On TomoTherapy Plan** - S Jang^{1*} , C Watchman² , (1) University of Arizona, Tucson, AZ, (2) University of Arizona, Tucson, AZ
- SU-FF-T-597** **Dosimetric Characterization of Whole Brain Radiotherapy (WBRT) Using Helical Tomotherapy** - A Gutiérrez^{1*} , H Chotaliya¹ , S Stathakis¹ , C Esquivel¹ , N Papanikolaou¹ , (1) University of Texas Health Science Center at San Antonio, San Antonio, TX
- SU-FF-T-615** **Multicenter Intercomparison for Treatment of the**

- Mesothelioma with IMRT and Tomotherapy** - G.Guidi¹*, M.Amadori¹, P.Antognoni¹, S.Tonoli²*, L.Spiazzi², B.Ghedì³, F.Banci Buonamici³, M. Schwarz⁴, C.Danielli¹*, M.Amichetti⁴, Prof.GP.Bitì³, Prof. S.M.Magrini², F.Bertoni¹. (1) Azienda Ospedaliero Universitaria Policlinico di Modena, Italy (2) Azienda Ospedaliera Spedali Civili di Brescia, Italy (3) Azienda Ospedaliero Universitaria Careggi di Firenze, Italy (4) ATreP – Provincial Agency for Proton Therapy, Trento, Italy
- SU-FF-T-616** **Influence of Respiratory Motion On Helical Tomotherapy Treatment Planning for Chest Wall Irradiation** - M Moldovan¹*, J Gibbons^{1,2}, C Chu¹, B Parker^{1,2}, (1) Mary Bird Perkins Cancer Center, Baton Rouge, LA, (2) Louisiana State University, Baton Rouge, LA
- SU-FF-T-654** **Dynamic TomoTherapy Treatment Delivery** - Y Chen¹*, W Lu¹, M Chen¹, Q Chen¹, E Schnarr¹, G Reitz¹, D Henderson¹, K Ruchala¹, G Olivera^{1,2}, (1) TomoTherapy, Inc., Madison, WI, (2) University of Wisconsin, Madison, WI
- SU-FF-T-663** **Treatment Plan Comparison Generated by Volumetric Arc Modulation with Helical Tomotherapy and Conventional IMRT for Prostate Cancer Patients** - D Tewatia*, R Tolakanahalli, B Paliwal, W Tome University of Wisconsin Madison, Madison, WI,
- SU-FF-T-664** **Dose Grid Effects in Adaptive Planning of Helical TomoTherapy for Hypofractionated Treatments** - C Yang¹*, N Sheth², S Murphy³, S Sim⁴, Y Chen⁵, (1) Monmouth Medical Center, Long Branch, NJ, AF, (2) Monmouth Medical Center, Long Branch, NJ, (3) Monmouth Medical Center, Long Branch, NJ, (4) Monmouth Medical Center, Long Branch, NJ, (5) Monmouth Medical Center, Lawrenceville, NJ
- SU-FF-T-670** **Dose Comparison of Rival Plans for Cranio-Spinal Irradiation Using Helical Tomotherapy** - G.Guidi¹*, M.Amadori², G.Tolento², E.Cenacchi¹, A.E.Francia¹, L.Morini¹, P.Antognoni², M.Parmiggiani², G.De Marco², C.Danielli¹, F.Bertoni² (1) Medical Physics Dpt., (2) U.O. Radiation Oncology. Azienda Ospedaliera Universitaria Policlinico di Modena, Italy
- SU-FF-T-674** **Evaluation of An Application to Transfer**

- Tomotherapy Plans to Step-And-Shoot IMRT Plans -**
R Tolakanahalli¹ *, P Hoban² , R Holmberg³ ,
C Sundgren³ , P Ploc² , W Tome¹ , (1) University of
Wisconsin Madison, Madison, WI, (2) TomoTherapy,
Inc., Madison, WI, (3) RaySearch Laboratories,
Stockholm, , SE,
- TH-C-BRC-2** **Lung Injury From Stereotactic Radiosurgery and
Efficacy of Amifostine: A Small Animal Study On
Helical TomoTherapy** - K Sheng, J Mata, J Cai,
J Larner, P Read, University of Virginia Health Systems,
Charlottesville, VA
Thursday 10am session Ballroom C
- TU-D-BRB-3** **Investigation of Energy Variation On TomoTherapy
HI-ART II Using An Aluminum Stepwedge** - T Racine¹
*, J Gibbons^{1,2} , D Lucas³ , B Cravens³ , T Krumbach³ ,
(1) Louisiana State Univ., Baton Rouge, LA, (2) Mary
Bird Perkins Cancer Center, Baton Rouge, LA,
(3) TomoTherapy, Inc., Madison, Wisconsin
Tuesday 1.30pm session Ballroom B
- TU-E-BRB-5** **Performance-Based QA for Radiotherapy: TG-148 –
Tomotherapy Quality Assurance** - K Langen¹ *, (1) MD
Anderson Cancer Center Orlando, Orlando, FL
Tuesday 4pm session Ballroom B
- WE-E-BRB-1** **Impact Or No Impact of Respiratory Motion On
Helical Tomotherapy Dose Delivery** - W Ngwa¹ *,
A Shah² , S Meeks³ , P Kupelian⁴ , K Langen⁵ , (1) M.D.
Anderson Cancer Center, Orlando, Orlando, FL, (2) MD
Anderson Cancer Center Orlando, Orlando, FL, (3) M.D.
Anderson Cancer Ctr Orlando, Orlando, FL, AF, (4) M.
D. Anderson Cancer Center Orlando, Orlando, FL,
(5) MD Anderson Cancer Center Orlando, Orlando, FL
Wednesday 4pm session Ballroom B
- WE-E-BRB-2** **Feasibility Study of Helical Tomotherapy for Dose
Painting** - M Deveau¹ *, S Bowen¹ , D Westerly¹ ,
R Jeraj¹ , (1) University of Wisconsin-Madison, Madison,
WI
Wednesday 4pm session Ballroom B