ARE Thermoacoustic Range Verification Select Conference Presentations
AAPM 2017, Thermoacoustic Range Verification Using Oblique Beams: TOPAS+k-Wave Simulations
PTCOG-NA 2017
1. Thermoacoustic Range Verification of Proton Beams: a simulation study integrating TOPAS Monte Carlo with k-wave acoustic software
2. Transducer Specifications for Thermoacoustic Range Verification
PTCOG 2018
3. Transducer Specifications for Thermoacoustic Range Verification
4. Two-step thermoacoustic range verification enabled by MC treatment plans and synchrocyclotrons: a simulation study
ASTRO 2019
5. “Thermoacoustic Range Verification in the Presence of Acoustic Heterogeneity and Soundspeed Errors – Accuracy and Robustness Relative to Online Ultrasound Images”
CIRM 2019
PTCOG 2020
7. “Thermoacoustic Range Verification Despite Acoustic Heterogeneity and Soundspeed Errors”
ASTRO 2021
8. “Thermoacoustic Range Verification During Delivery of a Clinical Plan to an Abdominal Imaging Phantom (CT/MRI/ultrasound)”
AAPM 2022
9. Thermoacoustic Range Verification During Pencil Beam Delivery of a Clinical Plan to an Abdominal Imaging Phantom
ASTRO 2021
10. Thermoacoustic Range Verification During Pencil Beam Delivery of a Clinical Plan to an Abdominal Imaging Phantom
FRPT 2021
11. THERMOACOUSTIC BEAM MONITORING DURING HIGH DOSE RATE RADIOTHERAPY
ESI 2021
12. Thermoacoustic Emissions Generated During Particle Therapy - analysis and application
ESTRO 2021
13. Thermoacoustic Range Verification During Pencil Beam Delivery of a Clinical Plan to an Abdominal Imaging Phantom
FRPT 2022
14. Single-shot thermoacoustic measurements during FLASH delivery with a clinical synchrocyclotron
AAPM 2022
15. Compact Radiation Detector for Wireless Thermoacoustic Range Verification Detects Pulse-to-Pulse Variations During Conventional Proton Therapy
16. Ionoacoustics for Proton Range Verification
PTCOG 2022
17. Single-shot thermoacoustic measurements during conventional delivery – conventional pristine VS. planned
AAPM 2023
18. Development of single-element transducer holders for isotropy quantification of ultrasound transducers used in proton therapy thermoacoustic range verification
Isaac Newton Institute 2023
PTCOG 2023
20. Single-shot thermoacoustic measurements during high dose rate delivery with a clinical synchrocyclotron
PTCOG 2024
21. Wireless 6-Channel Device for thermoacoustic Range Verification (tARV): Design
22. Wireless 6-Channel Device for thermoacoustic Range Verification (tARV): Results