**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

6. "Thermoacoustic Multi-Wave Phenomenon: Imaging & Range Verification" *https://library.cirm-math.fr/Record.htm?idlist=1&record=19286010124910042929*

NAPAC 2019

7. "Thermoacoustic Range Verification Despite Acoustic Heterogeneity and Soundspeed Errors"

PTCOG 2020

8. "Thermoacoustic Range Verification During Delivery of a Clinical Plan to an Abdominal Imaging Phantom (CT/MRI/ultrasound)"

AAPM 2021

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

19. Beating the Diffraction Limit in Thermoacoustic Range Verification During Particle Therapy: theory and experimental reality

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

PTCOG 2026

23. Thermoacoustic Range Verification: Dose Recomputation and Analysis of a PA Field Delivered to the Liver of an Anthropomorphic Phantom

**INDUSTRY SESSIONS**

PTCOG 2025

24. thermoAcoustic Range Verifier (tARV): A Research Tool for Clinical Workflows

PTCOG 2026

25. thermoAcoustic Range Verifier (tARV): A Research Tool for Clinical Workflows