Time (PDT)	Tuesday, August 01, 2023
6:00 AM	Welcome & Daily Overview
6:30 AM	Fahed Alsanea: **Managing uncertainties in proton therapy**
7:30 AM	Gilmer Valdes: **AI applications in radiation oncology: outcome prediction and adaptive therapy**
8:00 AM	Coffee & Snacks
8:30 AM	Carlos Granja: **Detection and characterization of fast and thermal neutrons in proton and ion radiotherapy secondary fields**
9:00 AM	Cristina Oancea: **Conventional and FLASH proton and electron beams characterization based on secondary and scattered particles: beam structure, DR, FLUX, LET**
9:30 AM	Paulina Stasica: **Single proton LET characterization with the Timepix detector and artificial intelligence for advanced proton therapy treatment planning**
10:00 AM	Jan Gajewski: **Single proton LET spectra scoring in Monte Carlo codes for applications in proton radiotherapy**
10:30 AM	Antoni Rucinski: 1) **Investigations of 3D-printed and commercial plastic scintillators for dosimetry applications** 2) **Designing a flexible treatment plan optimization tool for proton therapy based on Python environment and GPU acceleration**
11:00 AM	Niklas Wahl: **Beyond nominal dose calculation and optimization – v3 of the open-source treatment planning toolkit matRad**
11:30 AM	Jennifer Hardt: **Range Guided Treatment Planning Using Mixed Carbon-Helium Beams**
12:00 PM	Lunch Break
12:30 PM	
1:00 PM	Nils Krah: **Development of Gate 10- a new python based Geant4 application for simulations in medical physics and medical imaging**
1:30 PM	Michael Moyers: **A multi-stage Approach for Optimizing Light Ion Beam Portal Sets**
2:00 PM	Hanh Nguyen: **Deep Reinforcement Learning based Automatic Treatment Planning for Gamma Knife Radiosurgery**
2:30 PM	Mohan Saxena: **Characterization of a Positive Ion VOC Detector for Cancer Detection:** (**Introduction to VOC Cancer Diagnosis** by Kristiana Rood**)**
3:00 PM	Eli Haynal: **Signal Analysis Program for VOC Detection - Work in progress**
3:30 PM	Coffee & Snacks
4:00 PM	Free Time
4:30 PM	
5:00 PM	Proton Center Tour
8:00 PM	Redlands Bowl