Welcome to NICA days 2019 and IVth MPD Collaboration Meeting in Warsaw



Contribution ID: 89 Type: not specified

Analyzing the thermal images taken by Fluke TiS20 thermal imager

Friday 25 October 2019 13:45 (10 minutes)

Overheating electronic elements can causes them to function improperly, because of that measuring and controlling the temperature are major factors in terms of their longevity and reliability. Measurements can be done in discrete approach by using thermometers or by taking images using thermal imager and then analyzing them. In case of utilizing second approach it is easier to measure variety of subsystems in vastly reduced time, without necessity to setup whole array of apparatuses. By writing versatile MATLAB program I was able to analyze thermal images that can be used to investigate overheating elements, mean temperature and prepare graphs that can be used in future thermal analysis such as CFD simulations.

Author: PROTOKLITOW, Filip

Co-authors: MILEWICZ-ZALEWSKA, Michalina (Joint Institute for Nuclear Reactions); DABROWSKI, Daniel (Warsaw University of Technology); PERYT, Marek (Warsaw University of Technology); ROSLON, Krystian (Warsaw University of Technology (PL)); DUNIN, Nikita (JINR); CZARNYNOGA, Maciej (Politechnika Warszawska); BIELEWICZ, Marcin (Nacional Centre for Nuclear Research)

Presenter: PROTOKLITOW, Filip

Session Classification: TeFeNICA Session

Track Classification: TeFeNICA Student's Session