

CONCEPT OF A NEW APPROACH IN THERMOGRAPHIC MEASUREMENTS FOR PLASMA-WALL INTERACTION STUDIES ON KTM TOKAMAK

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The new approach of non-contact temperature measuring technique of metallic surface is currently being developed for KTM tokamak. Suggested technique is based on using thermographic camera and infrared laser. The pulsed IR laser radiation is used to observe changes in the emissivity of the body. This information will give possibility to make a correction of the thermal measurements of the thermographic camera. The developed technique will be used for an accurate spatial measurement of the heating temperature of the metal surface of the first wall candidate materials under the influence of thermal plasma fluxes on the KTM tokamak.

Preliminary experimental results of the suggested measurement technique have shown that the main idea of the approach is right.