

Abstract Submitted  
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**L-mode divertor heat flux profiles on COMPASS** PETR VONDRACEK, JAN HORACEK, JIRI ADAMEK, MICHAEL KOMM, Institute of Plasma Physics of the CAS, Prague, Czech Republic, MATYAS GROF, Faculty of Nuclear Sciences and Physical Engineering, CTU in Prague, Prague, Czech Republic, MIROSLAV SOS, MARTIN HRON, RADOMIR PANEK, Institute of Plasma Physics of the CAS, Prague, Czech Republic, COMPASS TEAM — Divertor heat flux was studied for a set of L-mode discharges performed in the COMPASS tokamak. The heat flux profiles were measured by divertor infrared thermography ( $\sim 0.6$  mm/px, 8 kHz for this experiment) for both the inner and the outer divertor region and by divertor probes (two radial arrays of Langmuir probes and one array of Ball-pen probes, spatial step 4 mm, 4 MHz sampling rate) for the outer divertor region. Dependence of the heat flux decay length  $\lambda_q$  on main plasma parameters was studied by varying the toroidal magnetic field, the heating power, the line averaged electron density and the plasma current. Very good agreement of both diagnostics for the sheath heat transmission coefficient  $\gamma = 11$  is presented. Observed heat flux decay lengths are compared to several existing multi tokamak scalings and modification of these scalings is proposed based on the measured data.

Petr Vondracek  
Institute of Plasma Physics of the CAS, Prague, Czech Republic

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