

THE DISCHARGE PHYSICS OF ATMOSPHERIC PRESSURE NON-EQUILIBRIUM PLASMA SOURCES

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In the past decade a number of inventive sources of atmospheric pressure non-equilibrium plasma have been introduced. Motivated by specific kinds of applications, these sources generate non-equilibrium plasmas that are either confined by electrodes or unbounded plasmas in the form of plasma-jets. In this paper the physics of these discharges is explored, with particular interest in their mechanisms for sustaining and stabilizing the discharge and also on their relation to low pressure discharges.