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ELECTRIC FIELDS IN kHz-DRIVEN PLASMA JETS

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What is the role of the flow in non-thermal atmospheric pressure plasma jets operating in 'bullet mode'? What is the influence of the target? How to they affect fundamental plasma properties such as electric field profile along the plasma plume? The answers are relevant both for the understanding of the processes in atmospheric pressure non-thermal plasmas and for the applications on materials sensitive to high temperatures, (bio)materials that are not resistant to vacuuming or even fully drying, (bio)targets that are sensitive to significant current transfer.
This paper will give an overview of the recent work in the electric field measurements in atmospheric pressure plasma jets that operate in the bullet mode. A kHz-driven jet in helium is used with flow rates up to 2 SLM, like the one reported on in [1].

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