# Measuring electric field and charge in plasma bullets

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## Measuring electric field and charge in plasma bullets

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Non-thermal atmospheric pressure plasma jets have been developed for use on thermosensitive targets at atmospheric pressure, such as many kinds of polymers or for biomedical applications. Diagnostics on these plasma sources is challenging because of their transient nature, often associated jitter and very small volume. This paper will show two methods of electric field measurements in a He kHz-driven jet, one based on spectroscopy and one on polarimetry and discuss the obtained results. The measured electric fields range from $10^5$ to $2 \times 10^6$ V/m.