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The effect of rf plasma fluctuation on floating harmonic probes
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Hanyang University — Measurement of electron temperature, plasma density and ion flux with floating harmonic method (FHM) has several advantages for RF plasma diagnosis. In principle, RF oscillation of plasma does not distort the characteristic of the probe at a floating potential. Thus, an active or passive RF compensation is unnecessary. However, in fact, the uncompensated probe results in higher electron temperature than the rf compensated probe especially at low plasma density. Plasma parameters from the FHM and that of Langmuir probe was compared, and it shows that the measured plasma parameter from RF compensated floating probe (FHM) has great agreements with Langmuir probe.

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