**Recent progress of Thomson scattering diagnostics at the 100kJ-level laser facility in China**

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The ultraviolet Thomson scattering diagnostics at the 100kJ-level laser facility in China has been upgraded by 2022. This upgraded diagnostic system allows simultaneous measurement of both time-resolved and space-resolved Thomson scattering spectra, with up to 7 measurement branches in 3 scattering angles (42-degree forward scattering, 90-degree side scattering, and 138-degree backscattering). Multiple plasma parameters can be obtained by flexibly choosing and combining Thomson scattering signals from different angles and different wavelengths (i.e. ion spectra around 263nm and electron spectra in 200nm-250nm). Experiments are conducted based on this diagnostic system to study the plasma conditions in gas-filled hohlraums for inertial confinement fusion. Besides obtaining more accurate plasma parameters (electron/ion density, temperature, flow velocity etc.) for benchmarking radiation hydrodynamic models, a wider range of physical issues can be studied further, including hydrodynamic instabilities (Rayleigh-Taylor instability and Kelvin-Helmholtz instability) and mixing at the interface of gas and wall plasma, return current instability in the hohlraum coronal region, two plasmon decay instability, etc.