HARPS3 and the Terra Hunting Experiment

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I will present an update on the HARPS3 and Terra Hunting Experiment project. Including a general instrument update, I will also present a summary of the current survey design and observing strategy of the Terra Hunting Experiment - our main goal to find planets with K = 10 cm/s with periods from 60-400 days around the brightest G and K-dwarf stars. Part of the HARPS3 instrument development has been on prototyping a new type of laser frequency-comb (LFC). The HARPS3 LFC will give us full wavelength coverage (380-690nm) and avoid the lifetime issues experienced by other "blue" LFCs - thus providing us with the exquisite calibration reference needed for the tracking of a 10-year programme looking for the very small 10 cm/s RV signals from Earth-like planets (Terra Hunting Experiment). We have exciting results to share from our LFC prototype, demonstrating the elusive coverage in the deep-blue. HARPS3 is planning to be on-sky by end-2024.