

A new concept of high accuracy laser ranging

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A new concept for high accuracy laser ranging will be presented. It is based on an injection seeded laser with frequency-shifted feedback making use of a non-Hänsch-type frequency comb. The method is distinctively different from schemes available on the market. An accuracy of 1 micron (or better) is achieved over meter-range. Alternatively, a rate of data taking of about 1 MHz for lower resolution measurements over larger distances, can be realized. The underlying non-trivial theory will be sketched and results presented.