



ID de Contribution: 174

Type: **Orale**

## **A new interferometric technique for real-time characterization of nanoparticles in a 5 $\mu$ L droplet**

*mercredi 10 juillet 2019 09:15 (15 minutes)*

Enumerating and distinguishing nanoparticles such as viruses, extracellular vesicles (ECV) or phages are major importance for many applications such as bioproduction of viral vectors for cell therapy, phages batches manufacturing or ECV for drug delivery. Detection methods such as PCR or epifluorescence microscopy for these applications are quite time-consuming and not easy to implement without labelling or damaging the sample. Moreover, there are currently no existing optical methods which are able to discriminate nanoparticles in real time. Thus, we develop a new technique based on full-field interferometry which makes possible the counting and characterization of nanoparticles in the range of 30nm – 10 $\mu$ m within seconds and with a 5 $\mu$ L droplet (Boccara et al, Biomed. Opt. Exp. 2016).

### **Choix de session parallèle**

3.4 SFO et PSV: Photonique et science du vivant

**Auteur principal:** M. GREFFET, Matthieu (MYRIADE)

**Orateur:** M. GREFFET, Matthieu (MYRIADE)

**Classification de Session:** Séance Parallèle