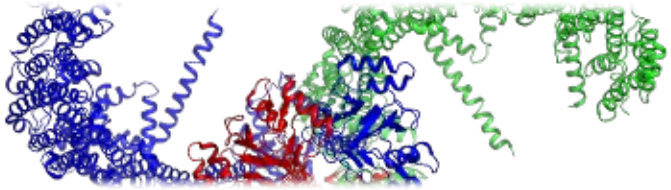

BPS2023
67th Biophysical Society Annual Meeting
February 18–22, 2023
SAN DIEGO
CALIFORNIA, USA

Monday, February 20
5:30 PM – 7:00 PM
Room 9
Elements srl

Nanopore Measurements At 10 MHz Bandwidth: Let's See the Hidden Data You Were Looking For!
From its introduction in February 2022 of the new 10 MHz bandwidth Nanopore Reader, several labs have started to use our new powerful instrument, featuring unprecedent results and signal quality in high bandwidth nanopore measurements.

We will present data from a recent work of Prof. Marija Drndic about ultrafast translocation and dynamics of double stranded DNA through a nanopore at 10 MHz bandwidth with acquisition of data points per 25 nanoseconds (150 MB/s). By introducing a rigorous algorithm, it was accurately identified each current level present within events. Remarkable sensitivity of this system reveals distortions of short-lived states at a lower bandwidth. This work develops broadly applicable methods that will help uncover a wide range of biomolecular dynamics at unprecedentedly small timescales.

10 MHz bandwidth allows to observe protein conformation and kinetics never observed before: here we present the latest results from protein measurements.

Speakers
Marija Drndic, Professors of Physics, University of Pennsylvania
Federico Thei, CEO, Elements srl