

LadHyX Seminar – October 17, 10:45

Jean-Benoit Morin
(Université de Nice)

Macroscopic analysis of jump and sprint force-velocity profiles: innovative methods, applications in elite sports context

Pr Morin will present some recently published biomechanical concepts and methods, and their direct implementation in high-level sports training contexts. This innovative force-velocity-power profiling approach of athletes physical capabilities in explosive movements (mainly jumping and sprint acceleration) will be described through the underlying theoretical concepts, the classical laboratory measurements, and recently validated field methods using simple inputs and devices such as smartphone applications. Examples of applications to sports training will include individualised, optimised training for jumping and sprint acceleration performance, as well as injury management. All concepts, methods and applications discussed will be supported by published scientific evidence.