# **SPRINT- AND** JUMP-DIAGNOSTICS FOR INDIVIDUALIZED **SPEED TRAINING**





**JEAN-BENOÎT MORIN PHD**Expert Biomechanics & Speed Diagnostics Université de Nice Sophia-Antipolis

- Theory about force-velocity-power profiling
- Evidence and simple field methods for both jumping and sprinting calculations
- Practical Application Jump and Sprint
- Interpretation for individualized training and injury management

Registration:

WWW.BSPA-FORTBILDUNGSAKADEMIE.AT

Price: € 137

# **SCHEDULE AND MAIN CONTENT:**

Getting faster is one of the biggest issues regarding sport and training. As a coach it is the holy grail to make their athletes quicker, especially within short preparation periods. Most of the time the players or athletes get tested for sprinting and jumping. However, the whole team keeps exercising the same way.

As a consequence, most athletes only renew their normal/basic level and only a few manage to increase their performance (but not necessarily).

#### The reason for that is simple!

Running fast is a complex skill that consists of coordinative, neuronal and strength parts. Every athelete has a unique mix of these factors. In addition to sprint/running/acceleration techniques, there are two main reasons of being a fast runner:

- Moving fast
- Using a lot of strength

The sprint performance is a result of the mixture of these factors and is known as the "force-velocity-power-profile".

When you know how the actual performance is put together, you will be able to identify strengths and weeknesses in your athletes speed/strength composition. Due to that knowledge you can individualize training in order to ensure benefits to all atheletes

Join this practical lecture and learn how to test and individualize speed training!

#### WHY should you attend this course?

#### After this course you are able to:

- Identify speed and strength potentials via sprint and jump performance diagnostics
- Individualize training programs
- Train time-efficient dont waste time with wrong exercises
- Train athletes in the most precise way

#### WHO should attend this lecture?

- Sport Scientists who are in performance diagnostics and professional coaching
- (Strength and Conditioning) Coaches who are working in sports like:
  - Football, Rugby, American Football, Handball, Basketball, Volleyball, Ice Hockey, Track and Field, Tennis,...
  - Or simply in any kind of sports where jumping height and acceleration matters!



# Topics/Agenda:

- Theory about force-velocity-power profiling
- Evidence and simple field methods for both jumping and sprinting calculations
- Practical Application Jump and Sprint
- Interpretation for individualized training and injury management

Time	Topic	
10- 14 am	Jump Diagnostics	
	Theoretical Background: Force-velocity-power profiling	
	Practical Application of simple field methods	
	Practical Implementation of Jumping Diagnostics	
14- 15 pm	Lunch/ break	
15- 18 pm	Sprint Diagnostics	
	Theoretical Background: Force-velocity-power profiling	
	Practical Application of simple field methods	
	Practical Implementation of Sprint Diagnostics	
18-19 pm	Data Interpretation and Individualization of Training	

# Insights in a part of the diagnostics:



>> https://www.youtube.com/watch?time\_continue=4&v=4rS2J4ZQI94

#### **SPEAKER:**



#### Jean-Benoît Morin PhD

Jean-Benoit (JB) Morin is currently Full Professor at the Faculty of Sport Sciences of the University of Nice Sophia Antipolis (France). He is a member of the Laboratory of Human Motor Function, Education Sport and Health, and an associate researcher with the Auckland University of Technology Sports Performance Research Institute New Zealand (SPRINZ). He obtained a Track & Field Coach National Diploma in 1998 and graduated in Sport Science at the University of Besançon, France in 2000.

He obtained his PhD in Human Locomotion and Performance in 2004 at the University of Saint-Etienne, France (supervised by Prof. Alain Belli), in collaboration with the University of Udine,

Italy (Prof. Pietro diPrampero). He was an Assistant Professor at the Sport Science Department of the University of Saint-Etienne and member of the Laboratory of Exercise Physiology from 2005 to 2014.

Pr Morin's field of research is mainly human locomotion and performance, with specific interest into running biomechanics and maximal power movements (sprint, jumps). He teaches locomotion, sports biomechanics, and strength training and assessment methods. He has published over 100 peer-review Journal articles since 2002, and collaborates and plays a consultant role with elite sprinters, rugby and football teams (among other sports) all over the world.

Pierre Samozino is an Associate Professor at the Sport Science department of University Savoie Mont Blanc in Chambery (France). His research activities, performed in the Inter-university Laboratory of Human Movement Biology (LIBM) are mainly based on biomechanical approaches and focus on muscle mechanical properties in relation to sport performance and on human locomotion biomechanics. He obtained his PhD in Human Movement sciences in 2009 at the university of Saint-Etienne (France) supervised by Pr. Alain Belli, Dr. Frederique Hintzy and Dr. JB Morin. After two years as junior lecturer at the Sport Science Department of the University of Saint-Etienne from 2009 to 2010, he worked one year (2011) in the Biomechanics and Exercise Physiology Laboratory of the outdoor sport equipment company Salomon.

The central part of his current research is to propose new concepts and simple methods to better understand the neuromuscular determinants of explosive performance (jumps, sprints, change of direction) and make possible their evaluation to the greatest number of sports practitioners, including strength and conditioning coaches in explosive sports (athletics, soccer, basketball, rugby ... ). Pierre Samozino teaches biomechanics, statistics and strength training for Bachelor and Master degree students. He is the author or co-author of over 60 peer review scientific papers from 2006, and collaborates with various sport teams and athletes.

#### More informations here:



http://jbmorinsportscience.blogspot.co.at/



https://www.researchgate.net/profile/Jean-Benoit\_Morin

# **TARGET AUDIENCE:**

Personal Trainers, Sport Scientists, Coaches from Team Sports, Track and Field, and Coaches from any kinds of sports where acceleration matters

# PRESENTATION LANGUAGE:

English

# DATE:

Saturday, 26.5.2018

# **DURATION:**

10 am- 7 pm

# LOCATION:

Auf der Schmelz 6, 1150 Wien



# **PRICES:**

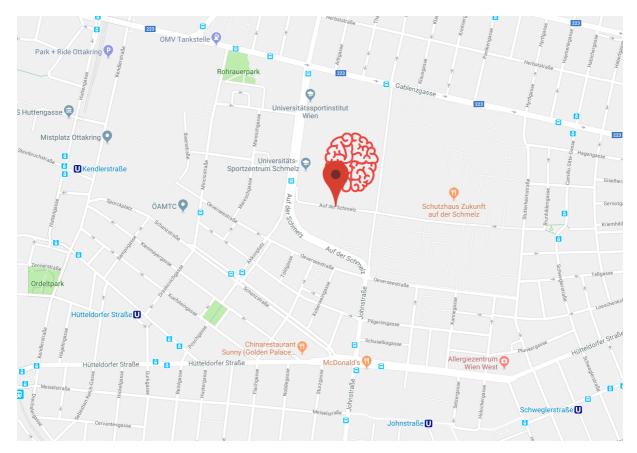
CATEGORIE	PRICE	LINK TO REGISTRATION
SA: 26.05.18	€ 137	>> http://bit.ly/2DF5EPT <<

#### **AVAILABLE SEATS:**

Minimum 15, maximum 50 seats

The organizer reserves the right to postpone, cancel or alter the program of the event if the minimum amount of reservations has not been reached.

# PARKING INFORMATION AND ARRIVAL:



#### By car:

At the institutional framework only a very short number of parking spaces are available. It is advisable to consider enough time for searching. On weekdays there are short-term parking zones around the institute. On Saturday and Sunday parking around the building is free of charge.

#### By public transportation:

Either by the metro (station U3 Johnstraße) with a short walk (5 min) or directly by the bus (station 10A Auf der Schmelz).

# **CONTACT AND INFORMATION:**

Website <u>WWW.BSPA-FORTBILDUNGSAKADEMIE.AT</u>

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