

Ski or Nordic walking -racket equipped with an energy harvester for monitoring health and dynamic behavior of the sportsman

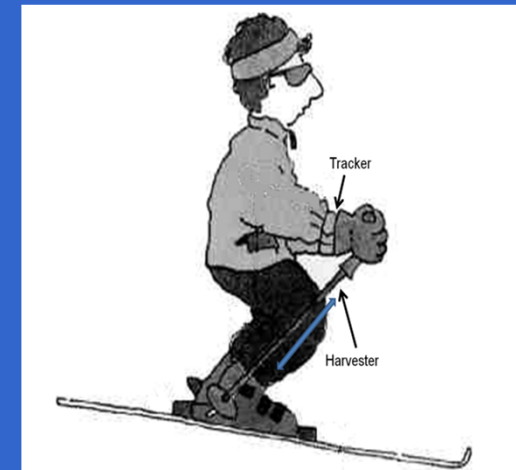
Relatore: Prof. Aurelio Somà , aurelio.soma@polito.it

Description

The cooperation between Politecnico di Torino and GABEL SRL integrate an energy harvester inside a ski or nordic walking racket typically used by athletes.

The internal harvester is able to convert the mechanical energy generated by the vibrational motion into electrical energy which is accumulated in a buffer battery. This stored energy then can be

used to power electrical devices such as localization device or satellite tracker that allows you to track and identify athletes who may be in difficulty or to be dispersed as a result of avalanches or landslides. In the context of safety the device eliminates the problem of having a tracking device that is prevented in awaiting its natural functioning due to a low power level .



Thesis work

- ✓ Requirements of the system
- ✓ Mechanical simulation / dynamics
- ✓ Mechanical Integration
- ✓ Sensors
- ✓ Full system Testing

