

COMET PROJECT

[DIMO-NEXT - NEXT LEVEL OF DIGITAL MOTION IN SPORTS, FITNESS AND WELL-BEING]

Main location: Salzburg (Salzburg)

Other locations: No

Thematic area: Digitalization | ICT

(according to www.ffg.at/comet/netzwerk)



Thematic focuses

- Human Motion Analytics
- On-body sensor networks
- Feedback learning
- Human Computer Interaction
- Smart textiles and printed electronics

Planned realisation and outcomes

The research program addresses three major topics in the field of motion data analysis, with the aim of improving fitness and well-being as well as long-term physical and mental performance in everyday movement, recreational sports and competitive athletes. In addition, DiMo-NEXT focuses on injury prevention and guided movement with prostheses and exoskeletons to promote digitally supported guided movement. DiMo-NEXT comprises the following research areas: (1) Analysis of human movement behavior with a focus on everyday movement habits, endurance & performance training & development of novel interaction concepts for users during exercise (unobtrusive user experience during activity) (2) Development of sensor and actuator systems with a focus on smart textiles and printed electronics for the detection of human movement and vital parameters (3) Analysis of movement data (from DiMo-NEXT prototypes and available wearable technologies).

COMET FACTSHEET

Selected company partners (max. 10):

1. Atomic Austria GmbH, AT
2. Datwyler, CH
3. Infineon Technologies Austria AG, AT
4. KARL MAYER STOLL R&D GmbH, DE
5. Pierer Innovation GmbH, AT
6. sanSirro GmbH, AT
7. Saphenus Medical Technology GmbH, AT
8. UNIQA Österreich Versicherungen AG, AT
9. WINTERSTEIGER AG, AT
10. Zanier-Sport Gesellschaft m.b.H., AT

Selected scientific partners (max. 5):

1. Salzburg Research Forschungsgesellschaft mbH, AT
2. Universität Salzburg, Interfakultärer Bereich Sport- und Bewegungswissenschaft, AT
3. Universität Salzburg, Human Center of Interaction, AT
4. JOANNEUM RESEARCH Forschungsgesellschaft mbH, AT
5. Linz Center of Mechatronics GmbH, AT

Selected international¹ partners (max. 5):

1. adidas AG, DE
2. École Polytechnique Fédérale de Lausanne, FR
3. Department of Textile Technology / Swedish School of Textiles – University of Borås, SE
4. Human Physiology and Sports Physiotherapy research group (MFYS) – Vrije Universiteit Brussel, BE
5. University of Strasbourg, FR

Duration: 01.04.2024 to 31.03.2028 (4 years)

Staff employment: 45 project employees, thereof 10 PhDs + 2 Post-Docs

Management: Univ.-Doz. Dr. Siegfried Reich, managing director

DI(FH) Elisabeth Häusler, project lead

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Status 12.02.2024

The COMET Module is funded within COMET – Competence Centers for Excellent Technologies – by BMK, BMAW as well as the co-financing federal provinces [federal province of Salzburg, federal province of Upper Austria, federal province of Tyrol]. The COMET programme is managed by FFG. www.ffg.at/comet

¹ Partners with headquarters outside Austria