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onMRI: AI-powered Objective MRI Analysis for Quantifiable Musculoskeletal Imaging

A quantitative imaging approach using automated segmentation and spatial alignment to turn routine MRI into reproducible numerical biomarkers for longitudinal and cohort comparison.

EVENT	2nd European Symposium on Interprofessional Collaboration on Osteoarthritis Management
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THEMES	Quantitative MRI · AI segmentation · Imaging biomarkers · Longitudinal comparison

Scientific focus

Conventional musculoskeletal MRI is usually interpreted qualitatively, which can introduce variability between readers and across time. onMRI is described as an AI-powered workflow that segments structures such as cartilage and menisci, spatially aligns them and derives standardised numerical measures from routine scans.

Why it matters

Quantitative biomarkers could make subtle structural change easier to compare between scans, individuals and centres. The presentation links imaging science with longitudinal osteoarthritis monitoring and treatment research, and brought the concept to a multidisciplinary audience of clinicians, imaging scientists and policy-makers in Porto.