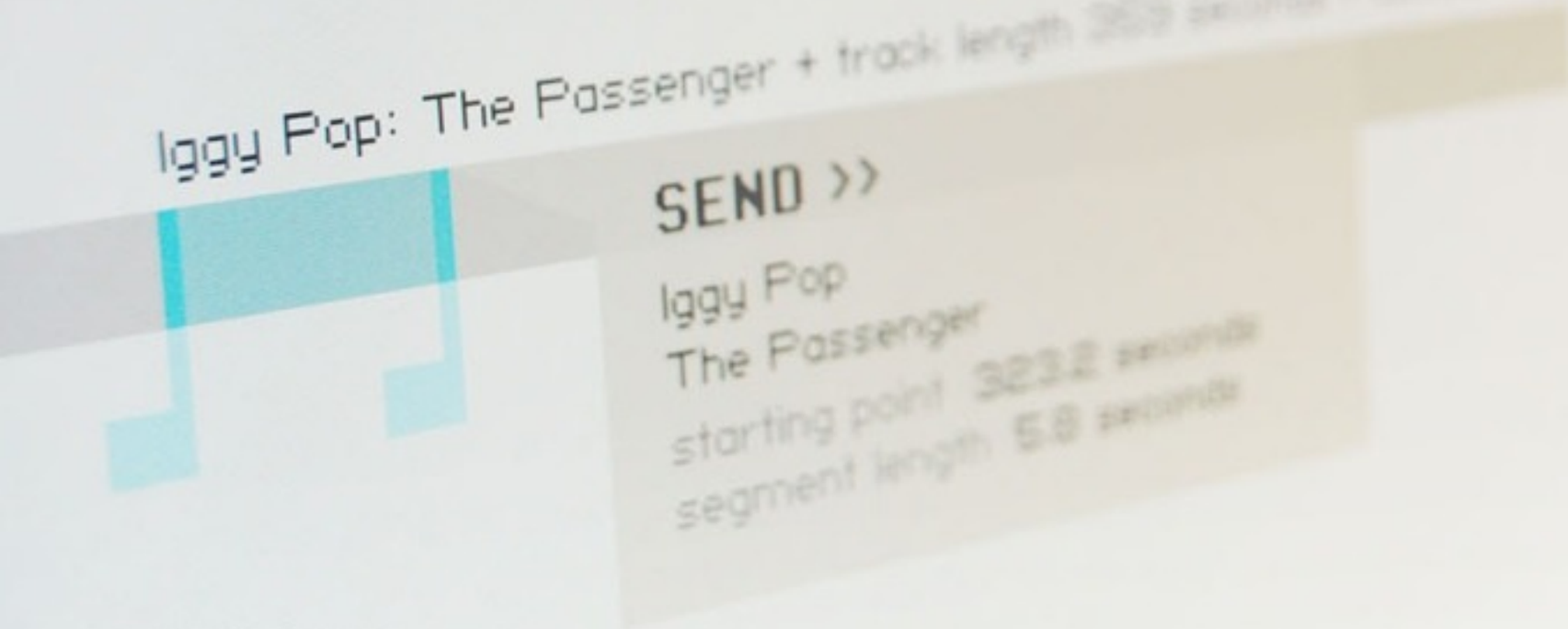


Roadmap for Music Information ReSearch

FP7-ICT-2011-7
Coordination and support action
Project number: 287711

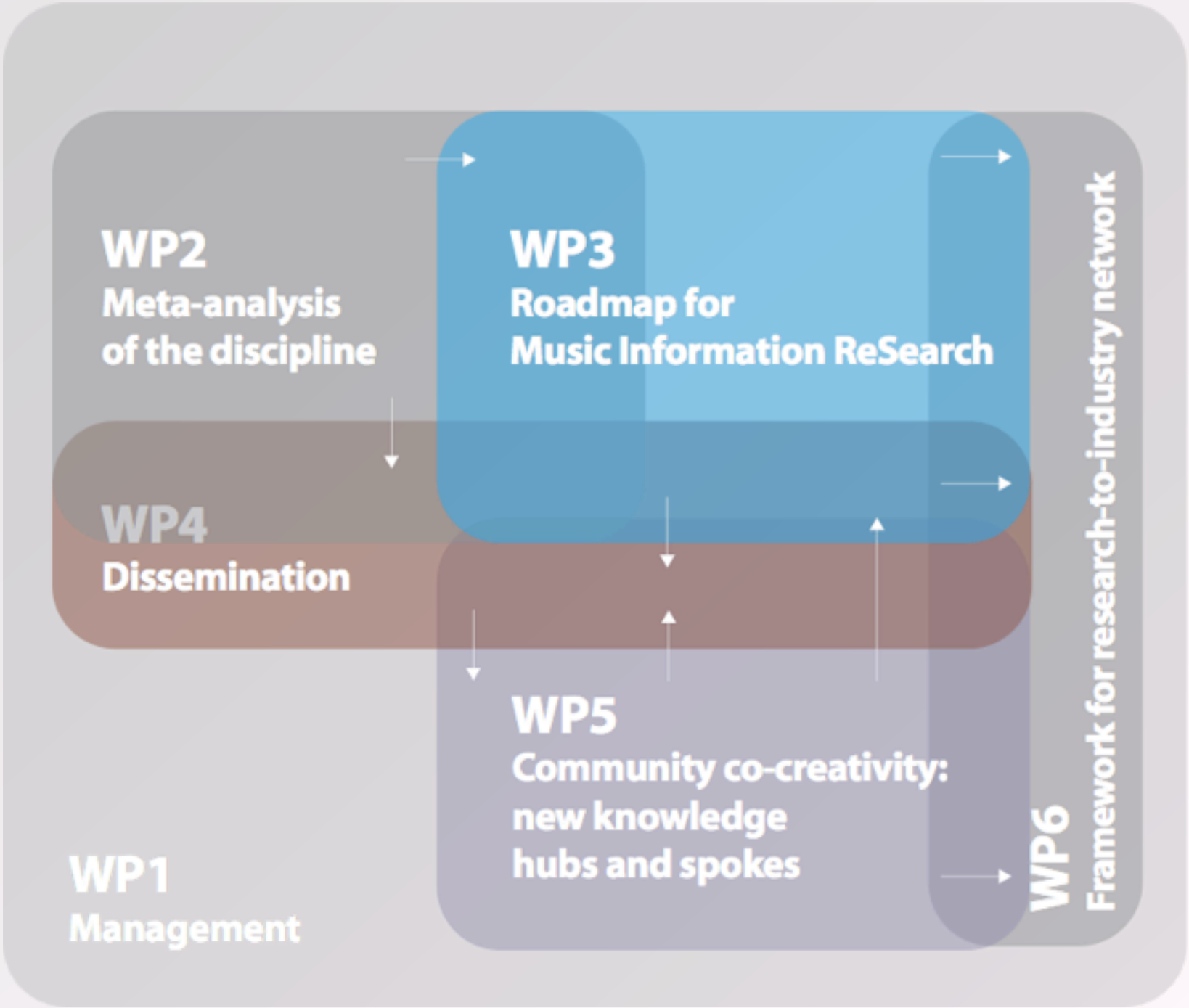
Partners

- Universitat Pompeu Fabra - Music Technology Group, Barcelona, Spain (admin/ financial coordinator)
- Stromatolite Design Lab, London, UK (scientific coordinator)
- OFAI, Austrian Research Institute for Artificial Intelligence, Vienna, Austria
- INESC, Instituto de Engenharia de Sistemas e Computadores, Porto, Portugal
- IRCAM, Institut de Recherche et Coordination Acoustique/Musique, Paris, France
- Centre for Digital Music, Queen Mary, University of London, UK
- BMAT, Barcelona Music and Audio Technology, Barcelona, Spain

MIReS

The field of Music Information Retrieval (MIR) has centered primarily on the analysis of sound signal for the purpose of more efficient search and faster access to digital collections of recorded music. By expanding its context and addressing challenges such as multimodal information, multiculturalism and multidisciplinarity, MIR has the potential for a major impact on the future economy, the arts and education, not merely through applications of technical components, but also by evolving to address questions of fundamental human understanding, with a view to building a digital economy founded on "uncopiable intangibles": personalisation, interpretation, embodiment, findability and community. Within this wider context we propose to refer to the field of MIR as Music Information ReSearch (MIReS) and thus widen its scope, ensuring its focus is centered on quality of experience with greater relevance to human networks and communities.

WP structure and interdependencies



Three MIReS perspectives

- technical-scientific

  research aimed at processing music-related digital data with the goal to develop music applications

- socio-cultural

  research aimed at providing music data and technology to enhance social interactions, cultural exchange and behavioural patterns

- exploitation

  research aimed at providing music technology that permits music industry stakeholders, artists and listeners to easily and intuitively discover, organise, transform, interact with, and enjoy music in novel ways

Technical-scientific perspective

- musically relevant data
- music representations
- data processing methodologies
- knowledge-driven methodologies
- music content analysis
- interface and interaction aspects
- evaluation of research results

Technical-scientific MIReS events: core community

- Porto October 8-12, ISMIR, MIRRORS session

Thursday October 11, 2012

9:30 AM - 10:50 AM **Oral Session 7: MIRrors Session (check also open call for papers in JIIS special issue)**

Automatic Music Transcription: Breaking the Glass Ceiling

Emmanouil Benetos, Simon Dixon, Dimitrios Giannoulis, Holger Kirchhoff, Anssi Klapuri
Queen Mary University of London

Putting the User in the Center of Music Information Retrieval

Markus Schedl[1] and Arthur Flexer[2]

[1]Johannes Kepler University, [2]Austrian Research Institute for Artificial Intelligence

The Impact (or Non-impact) of User Studies in Music Information Retrieval

Jin Ha Lee[1] and Sally Jo Cunningham[2]

[1]Information School, University of Washington, [2]Department of Computer Science, University of Waikato

Mel Cepstrum & Ann Ova: The Difficult Dialog Between MIR and Music Cognition

Jean-Julien Aucouturier and Emmanuel Bigand
LEAD Lab, University of Burgundy, Dijon

Moving Beyond Feature Design: Deep Architectures and Automatic Feature Learning in Music Informatics

Eric J. Humphrey, Juan P. Bello, Yann LeCun
NYU

Reuse, Remix, Repeat: the Workflows of MIR

Kevin Page[1], Ben Fields[2], David De Roure[1], Tim Crawford[3], J. Stephen Downie[4]

[1]University of Oxford, [2]Musicmetric (Semetric Ltd.), [3]Goldsmiths University of London, [4]University of Illinois

Technical-scientific MIReS events: core community

- Porto October 8-12, ISMIR, panel session (http://ismir2012.ismir.net/)

Socio-cultural perspective

- social aspects
- culture specificity
- user behaviour

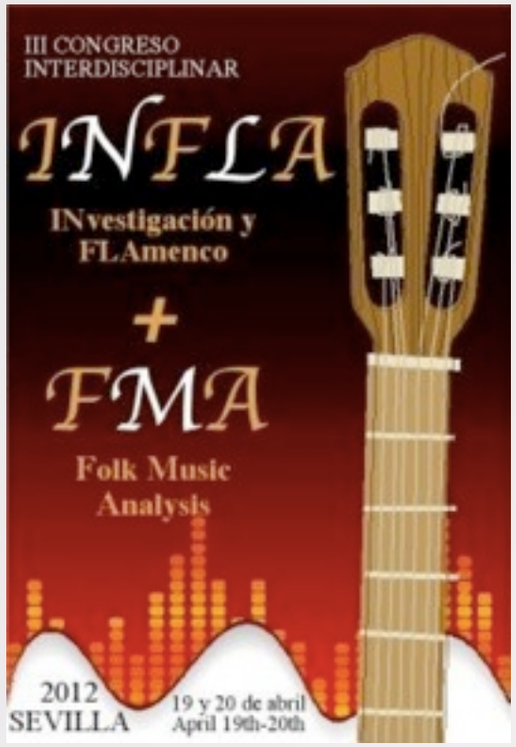
Socio-cultural MIReS events: multiculturalism

- Delhi, KIIT, 20-22 January 2012: MIReS CompMusic and Multiculturalism workshop, International Symposium Frontiers of Research on Speech and Music (http://compmusic.upf.edu/)

- Istanbul, 18-23 June 2012: General CompMusic workshop with invited researchers and musicologists organised by MIReS (http://compmusic.upf.edu/)

Socio-cultural MIReS events: ethnomusicology

- Seville 20th April MIReS multicultural panel as part of the FMA workshop (http://congreso.us.es/infla3/en/)



Socio-cultural MIReS events: music psychology

- London CMMR "Music and Emotions" 19-23 Jun, panel discussion organised by MIReS (http://www.cmmr2012.eecs.qmul.ac.uk/)

Exploitation perspective

- music industry applications
- artistic applications
- research and educational applications
- creative industries applications

Exploitation MIReS events: performance

- Paris, MIR and Creation workshop, IRCAM, 2 June, organised by MIReS (http://www.dailymotion.com/playlist/x24vot_Ircam-CGP_mir-and-creation/)

Exploitation MIReS events:

- Barcelona, Sonar, Music Hack Day, organised by UPF-MTG and MIReS, 14-16 Jun (www.sonar.es)

Exploitation MIReS events: MIR and industry

- Barcelona, Sonar, Make, Play, Share: the future of music tech, organised by MIReS, 14 June 2012 (http://www.youtube.com/watch?v=-a-IvdzSbeI)

Exploitation MIReS events:

- Porto October 8-12, ISMIR, concert programme (http://ismir2012.ismir.net/)

Exploitation MIReS events: NoE research-to-industry

- London, Music Tech Fest: Music Discovery and Creativity Workshops, Music Hack Camp and Trend-Spotting Industry Event, 17-19 May, co-organised by MIReS (http://www.musictechfest.org/, @MusicTechFest)

Exploitation MIReS events: academic researchers

- London, Music Tech Fest: Music Discovery and Creativity Workshops, Music Hack Camp and Trend-Spotting Industry Event, 17-19 May, co-organised by MIReS (http://www.musictechfest.org/, @MusicTechFest)

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Exploitation MIReS events: industry innovators

- London, Music Tech Fest: Music Discovery and Creativity Workshops, Music Hack Camp and Trend-Spotting Industry Event, 17-19 May, co-organised by MIReS (http://www.musictechfest.org/, @MusicTechFest)

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Exploitation MIReS events: hackers

- London, Music Tech Fest: Music Discovery and Creativity Workshops, Music Hack Camp and Trend-Spotting Industry Event, 17-19 May, co-organised by MIReS (http://www.musictechfest.org/, @MusicTechFest)

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Exploitation MIReS events: artists

- London, Music Tech Fest: Music Discovery and Creativity Workshops, Music Hack Camp and Trend-Spotting Industry Event, 17-19 May, co-organised by MIReS (http://www.musictechfest.org/, @MusicTechFest)

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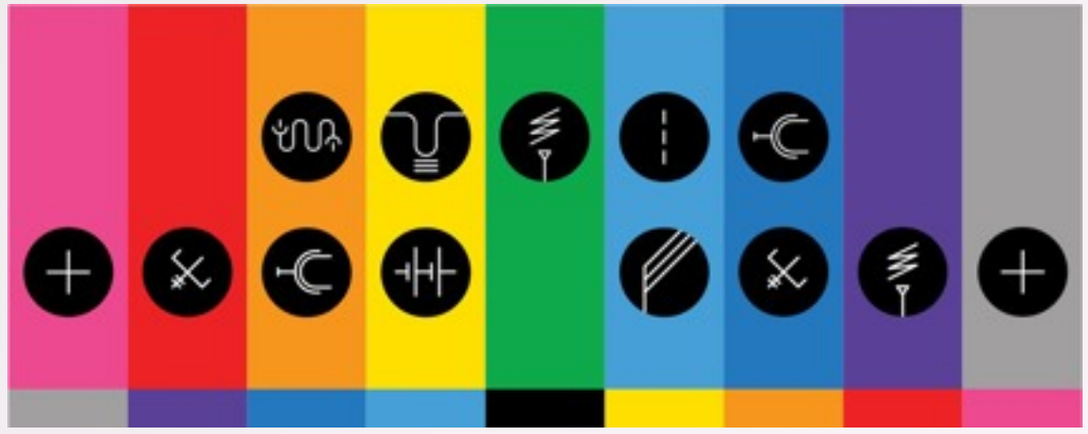
Exploitation MIReS events: NoE research-to-industry

- London, Music Tech Fest: Music Discovery and Creativity Workshops, Music Hack Camp and Trend-Spotting Industry Event, 17-19 May, co-organised by MIReS (http://www.musictechfest.org/, @MusicTechFest)

The Music Tech Fest gathered:



- 52 contributors
- 77 workshop participants
- 75 hackers
- 1,036 attendees
- over 10,000 users visited the website during May only
- the live streaming broadcast was seen by over 700 viewers from 40 countries
- the festival generated 830 minutes of video footage on each of the 3 cameras
- growing TED-style web community (http://www.youtube.com/musictechfest/)

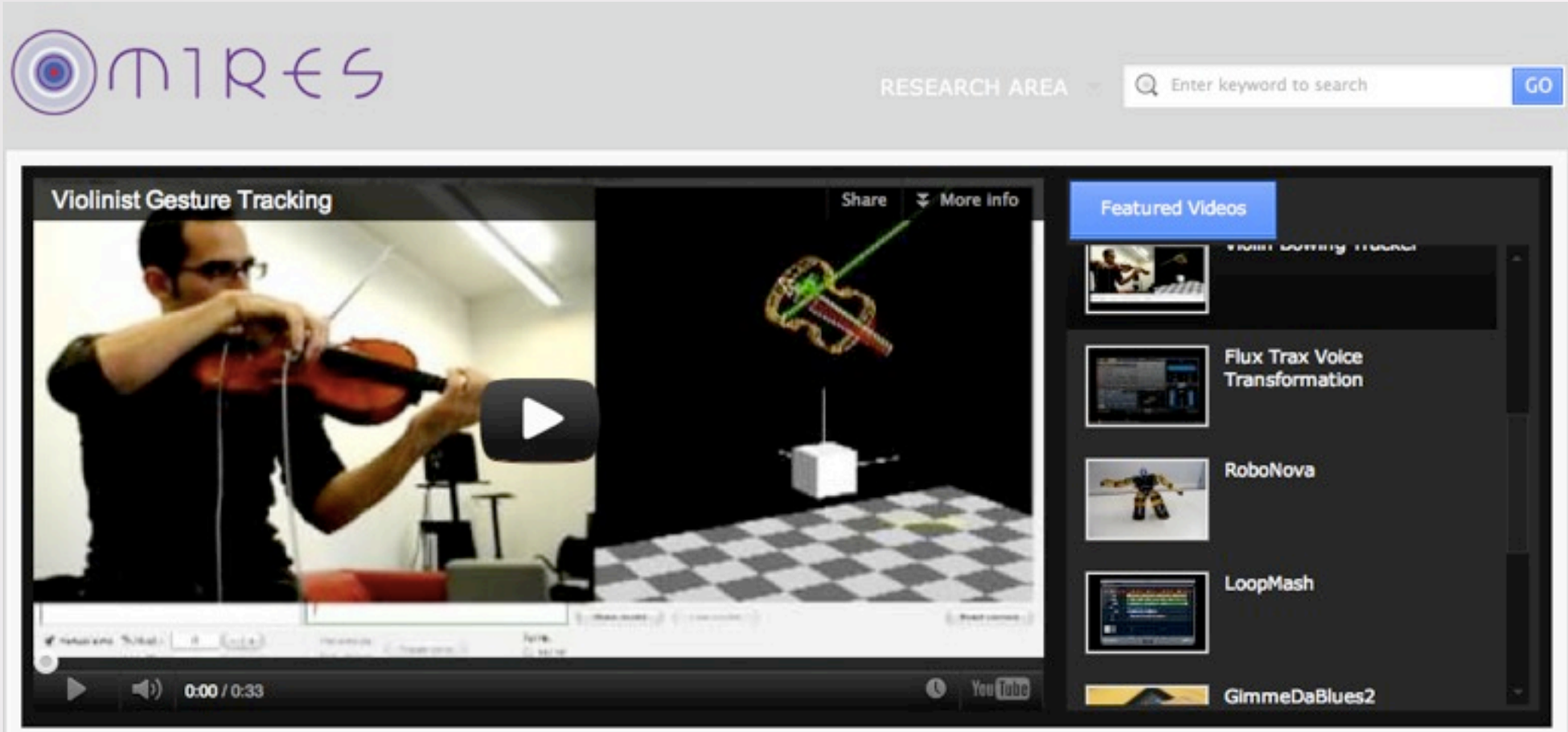
Exploitation MIReS events:

- Istanbul, October, MIReS at the NEM Summit (http://nem-summit.eu/)

- Music Tech Fest Synaesthesia app http://www.youtube.com/watch?v=GcOqtvsuhxw

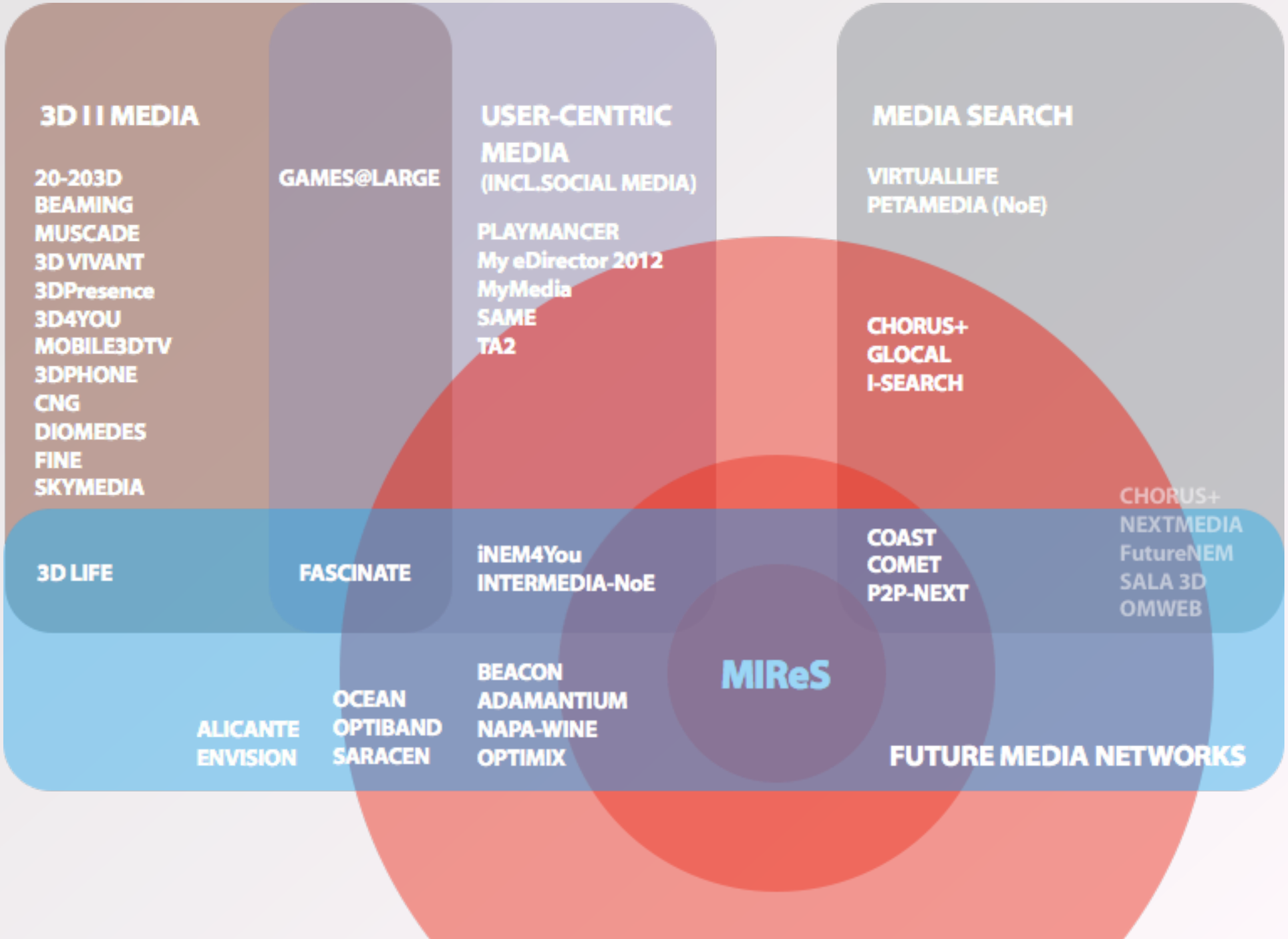
MIReS roadmap challenges

- http://mires.eecs.qmul.ac.uk/wiki/index.php/MIR_Challenges



- http://www.mires.cc/
- @MIReS_roadmap

Community involvement



MIRES

Roadmap for Music Information ReSearch

Thank you

MIReS.cc