

## **CALLAS: SHORT ABSTRACT**

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Conveying Affectiveness in Leading-edge Living Adaptive Systems

**CALLAS**

Project IST-34800

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Abstract  
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## CALLAS short abstract

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<http://www.callas-newmedia.eu>

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*...as Maria CALLAS provided a more emotional approach to her music, the CALLAS project will introduce emotional and natural interaction into New Media applications...*

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CALLAS (Conveying Affectiveness in Leading-edge Living Adaptive Systems) is a Integrated Project funded by the European Commission under FP6 in FP6-2005-IST-5 Call , Strategic objective Multimodal Interfaces (2.5.7) and will run from November 2006 to April 2010.

The project aims at selecting or developing a set of components (the "[Shelf](#)"), which can be used to generate Affective Multimodal Interfaces, that is emotionally-aware user interfaces. Such components include recognition of speech with emotional utterances, of gaze and facial expression, gesture and motion tracking, audio-video feature extraction, emotional natural language generation and affective music synthesis, as well as Emotional Attentive ECAs (conversational expressive agents).

As a second aim, CALLAS intends to handle interoperability between those components through the development of an open source "Framework" performing the fusion of emotions and their rendering via emotional models. As this software infrastructure is addressed to final users, this layer will hide the complexity of affective computing to digital artists, performers, theatre and broadcasting companies, and it will also open further development scenarios applied outside the primary target field of art and entertainment.

The capabilities of the CALLAS [Framework](#) will be demonstrated through the development of CALLAS [Showcases](#), significant test-beds in the context of New Media, embryonic samples of applications of the future addressing three main fields: AR art, Entertainment and Digital Theatre, Interactive Installation in public spaces and Next Generation Interactive TV.

After two years of research and development made by the consortium partners, CALLAS is ready to showcase its preliminary results for prototypal applications within Art and Entertainment. At Presence 2008 two CALLAS show cases will be illustrated and discussed: the Digital Theatre's performance developed by Studio Azzurro for Teatro degli Arcimboldi in Milan (July 2008), [Galileo all'inferno](#), and the performance [Virtuaali/Virtuosi](#) held at Finnish Museum of Fine Arts, Helsinki, developed by the Helsinki University of Technology (February 2008). Moreover project aims, methodologies, technologies and firsts results will be presented and on open space of discussion and networking.

The CALLAS Consortium is open to share its findings to external members, through the sponsoring of discussions threads, testing, brainstorming, technology evaluation and more. Vital to this is the establishment of a [the C<sup>3</sup> \(C-Cube\)](#), that stands for CALLAS Community Club, a social network linked to the project where discussion are open and free, opinions are shared between C<sup>3</sup> members and project members and a synergy with project developments and technology evaluation is kept to maximise the adoption.

We sponsor a widest participation to the C<sup>3</sup> to gather complementary understanding of the requirements of artists, amateurs, technologists, performers to better address them during the prototypes development and to foster early adoption of the technology along with the project progress.

If you are an emotional IT fellow, we welcome you on board!