

## COST Cooperation



### SHORT-TERM SCIENTIFIC MISSIONS

#### EVALUATION FORM for APPLICATIONS for SHORT-TERM SCIENTIFIC MISSIONS

COST Action : **Cost287-ConGAS**  
Working Group : **WG3**  
Proposing Applicant : **Kjetil Falkenberg Hansen**  
Host Institute : **Hilmar Thordarson, Listaháskóla Íslands (Iceland Academy of the Arts)**  
Period : **Jan 9 – 22, 2006**  
Place : **Reykjavik**

#### GENERAL CRITERIA

CRITERIA	MARK <sup>1</sup>	COMMENT
○ <b>Scientific quality of the application</b> · originality · feasibility of approach		
○ <b>Compatibility with the COST Action</b> · compatibility with the MoU · added value to Action · extended network of contacts · timeframe of application · timeframe of Action		
○ <b>Realism of the Application</b> · feasibility within timeframe proposed · justification of the finance requested		
○ <b>Qualifications of the Applicant</b> · research being undertaken · research already undertaken · publications · participation in international research cooperation		
○ <b>Application of Results</b> · impact for Action · dissemination of result		
<b>Overall Evaluation</b>		

Recommend to Accept	
Recommend to Reject	
Recommend to Modify	

<sup>1</sup>Please indicate one of the following : (NA = not applicable, 1 = poor, 2 = average, 3 = good). The subdivisions of the criteria only indicate examples of the factors to be considered and do not require an individual evaluation. If your recommendation is "modify" then please explain how.



**SHORT-TERM SCIENTIFIC MISSIONS**

**APPLICATION FORM**

**For the attention of the chairperson of the Management Committee COST Action Cost287-ConGAS:**

**FROM**

**Name** : Hansen  
**First Names** : Kjetil Falkenberg  
**Nationality** : Norwegian  
**Gender** : Male  
**Academic qualifications** : Masters in music, PhD student in Music Acoustics  
**Telephone** : +4687907857  
**Telefax** : +4687907854  
**E-mail Address** : hansen@speech.kth.se

**HOME ORGANISATION**

**Full address** : Speech, Music and Hearing, KTH  
**Street** : Lindstedtsvägen 24  
**Town and Postcode** : 10044 Stockholm  
**Country** : Sweden

**HOST ORGANISATION**

**Name** : Thordarson  
**First Names** : Hilmar  
**ORGANISATION** : Listaháskóla Íslands (Iceland Academy of the Arts)  
**Street** : Sölvhólgata 13  
**Town and Postcode** : 101 Reykjavík  
**Country** : Iceland

**STSM PERIOD**

**Period** : From Jan 9 to Jan 22, 2006



**SHORT-TERM SCIENTIFIC MISSIONS**

**1. Detailed Work Plan**

Title: **Finding ways to play new musical instruments**

The aim of the visit is to explore and evaluate playability of a few Pure Data patches (Pd, <http://www.puredata.org>) developed at TMH, KTH. This will be achieved by letting students at TV build new controllers and experiment with different gesture sensors and mapping strategies. Pd patches from KTH:

- Skipproof (a Pd patch for virtual scratching by K.F. Hansen)  
<http://www.speech.kth.se/hansen/software.html>
- pDM (a Pd version of Director Musices for changing expressivity in MIDI-files in real-time by Anders Friberg et.al)  
<http://www.speech.kth.se/music/performance/download/>
- Vodhran (the virtual Bodhran Pd patch by Sofia Dahl et.al)

One way to evaluate the playability of these mappings is to use the Pd patch Expressiball. Expressiball is developed for monitoring expressive playing graphically in a 3D emotional space, and can be used to measure how the musician can produce and reproduce performances with varying expressive content.

KTH will provide the patches, including a mapping and calibration patch for input devices. Following hardware will be available in addition to TV's own equipment:

- Kroonde and Toaster hardware (from LaKitchen, wired and wireless), both allowing 16 input channels for sensors (pressure, bending, magnetic field etc)
- RadioBaton, a 3D antennae with 'thimble' controller or drumstick sender
- PICO 11 channel ADC converter for connecting self-built sensors to printer-port on PCs

Using the above, students at TV will build new interfaces for controlling the pd patches. During this construction phase, different gesture controllers and mapping strategies will be tested. With the new and existing controllers we can explore some of the possibilities and limitations of the patches in a normal musical setting (practise sessions) and hopefully even performing live with the new instruments.

Student experiences and performances will be collected in interviews/questionnaires and video recordings.

Estimated time schedule:

- Day 1* : introduction and presentation of the patches
- Day 2-4* : building and testing controllers
- Day 5* : evaluating controllers, discussing and testing mapping strategies
- Day 6-8* : testing playability by practising with Expressiball and in musical situations, fine-tuning sensors, controllers and mappings
- Day 9* : preparation for a short performance
- Day 10* : performance (if possible), discussions and informal evaluation, questionnaires

**Dissemination:** The results from this work will be documented in a future paper with preliminary titel "Testing mapping strategies for new musical instruments".



**SHORT-TERM SCIENTIFIC MISSIONS**

**2. Curriculum Vitae - Kjetil Falkenberg Hansen**

*Fields of interest:* Scratching, new musical interfaces, control of musical instruments, expressiveness in scratching, music.

- 1972 Born in Larvik, Norway
- 1992 Examen Philosophicum, University of Oslo
- 1993 Played clarinet in HMKG's music company, Oslo
- 1994-1998 Teacher education, The Faculty of Teacher Education, Trondheim
- 1995-1999 Music studies to Candidatus Philologiae (Master), The Department of Musicology, NTNU, Trondheim
- 1996-2000 Worked as teacher for clarinet and saxophone, Klæbu Public Music School
- 2000 Speech and music technology, course at Institute of electronics and telecommunication, NTNU, Trondheim
- 2000-2001 Worked as music teacher at Hagsåtra secondary school, Stockholm, Sweden
- 2001 Music acoustics, course at KTH
- 2001-present Worked in various EU projects at TMH (Mosart, Sounding Objects, AGNULA, IMUTUS, S2S<sup>2</sup>)
- 2002-present Webmaster at TMH
- 2003-present PhD student in Music Acoustics, KTH

**Reviewed publications**

- Hansen, K.F. & Bresin, R. (2003). Analysis of a Genuine Scratch Performance. Proceedings of the 5<sup>th</sup> International Workshop on Gesture and Sign Language based HCI, Springer-Verlag, 2004 , LNAI 2915 , 519–528.
- Hansen, K.F. & Bresin, R. (2003). Complex gestural audio control: the case of scratching, in Rocchesso & Fontana (Eds.) The Sounding Object, Mondo Estremo, Firenze, Italy, 221–269.
- Hansen, K.F. (2002). The basics of scratching. Journal of New Music Research, Vol. 31, No. 4: 357–367.
- Hansen, K.F. (2000). Turntable Music. In Jonsson, Oversand & Breivik (Eds.) Musikklidenskapelig Årbok 2000. Dep. of Music, NTNU, Trondheim 2000, 145–160. This article is a summary of the Master's thesis.

**COST Cooperation**



**SHORT-TERM SCIENTIFIC MISSIONS**

**3. Detailed estimation of the funding requested**

Amount requested from CEC:

- Travel: 450 EURO
- Accommodation: 1100 EURO
- Other subsistence: 450 EURO
- Total grant request: 2000 EURO

Previous CEC financial support or current requests to the CEC (COST or other Commission activities): none.

***Details of bank account:***

- Bank: Skandiabanken, Sweden
- Account number: 9150 3733868
- SWIFT: SKIASSESS

**4. I enclose the "Acceptance by the host institution" of the work plan duly signed.**

I would be pleased to provide further information if requested to do so.

I, the undersigned, declare that the information provided above and enclosed is, to the best of my knowledge, accurate and complete.

***Date:*** ..... ***Signature:*** .....



### Acceptance by the Host Institution

This declaration is to be completed by the head of the host research group and returned to the grant applicant.

**Name** : Thordarson  
**First Names** : Hilmar  
**ORGANISATION** : Listaháskóla Íslands (Iceland Academy of the Arts)  
**Street** : Sölvhólgata 13  
**Town and Postcode** : 101 Reykjavík  
**Country** : Iceland  
  
**Telephone** : +354 552 5020  
**Telefax** : +354 561 6314  
**E-mail Address** : hiltor@lhi.is

- (i) I, the undersigned, am willing to receive Kjetil Falkenberg Hansen in my institution on a short-term scientific mission in the frame of the COST Action **Cost287-ConGAS** to undertake the work described in the attached work plan.
- (ii) The duration of the request is from January 9, 2006 to January 22, 2006.

Date:

30.05 '05

Signature: