



**Speaker Odyssey Discussion**

**“International  
collaborations”**

Joe Campbell, JF Bonastre and YOU!

# Outline

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- ⌘ Introduction (short)
- ⌘ Collaboration descriptions
  - ⌘ SPLC ISCA SIG
  - ⌘ COST Projects
  - ⌘ Elisa
  - ⌘ NIST
- ⌘ Discussion

# A short example of the effect of collaboration

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⌘ Jean-François Bonastre

⌘ Frédéric Bimbot

⌘ Odyssey program = Jean-François Bimbot

## Speaker Odyssey Discussion



**“International  
collaborations”**

Joe-François Bimbot and YOU!

# SPeaker and Language Characterization ISCA Special Interest Group

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- ⌘ An international structure to coordinate collaborative efforts
- ⌘ Born after 1998 RLA2C Workshop Discussion
- ⌘ Began in 2000
  - ⌘ Academic researches
  - ⌘ Commercial applications
  - ⌘ Forensic
  
  - ⌘ Evaluation
- ⌘ <http://www.lia.univ-avignon.fr/heberges/SPLC>
- ⌘ [splc.org](http://splc.org) ?

# SPeaker and Language Characterization

## ISCA Special Interest Group

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⌘ Main activity :  
Speaker Recognition Workshop sponsoring

⌘ Workshop "editing committee"

⌘ 1994

⌘ 1998

⌘ 2001

⌘ 2004

⌘ ...

⌘ 3000 ??

⌘ New workshops about Language ? Characterization ?

# SPeaker and Language Characterization

## ISCA Special Interest Group

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### ⌘ Other objectives

- ☒ Central point to find information
- ☒ Evaluation paradigm
  - ☒ Academic work
  - ☒ Applications
  - ☒ Forensic
- ☒ Forensic (common paper)

⌘ Join SPLC! And SPLC will extend its activities...

⌘ Help us to internationalize SPLC

Nominations for the board

Email candidature and voting before Eurospeech

⌘ Javier / John / ...

# Elisa

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- ⌘ Open consortium based on Best Effort strategy
- ⌘ Variable structure over the years
- ⌘ No funding (no administration load)
- ⌘ Evaluation + collaboration culture (like NIST Evaluations)
  
- ⌘ Common research tools
  - ⌘ software
  - ⌘ definition of data sets in order to compare the systems
  
- ⌘ Frédéric / Gérard / ...



# COST Projects

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## ⌘ COST

(Cooperation on Scientific and Technological Issues)

- ⌘ Noncompetitive research
- ⌘ Cooperation framework
- ⌘ Support to research dissemination (e.g. workshop) and human mobility
- ⌘ COST action may follow up in 'competitive' EC funded projects

# Previous COST actions in speech technology

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- **COST 209** Speech Input Output Interfaces
- **COST 232** Speech Recognition Over the Telephone Line
- **COST 250** Speaker Recognition in Telephony
- **COST 258** Speech Synthesis Naturalness

# Current COST actions in speech technology

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- **COST 275**  
Biometrics-Based Recognition of People over the Internet
- **COST 277**  
Nonlinear Speech Processing
- **COST 278**  
Spoken Language Interaction in Telecommunication

# How to join?

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- Contact your National COST Representative and ask to sign the MoU (*Memorandum of Understanding*)
- Each EU country may have two Official Members in the Management Committee
- Other European countries only one member
- *Non Europeans may participate (no refund, no vote in the Management Committee)*

# COST 275

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## Biometric Identification of People over Internet

A European Project under the EU DG13

Project Open to 'All' Countries

(financial support only for EU and other European countries)

# Status of the COST 275

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- Kick-off meeting held in Brussels 8 June 2001
- Few countries have signed the MoU until now  
*(you have the opportunity to join now!!!)*
- You may join COST anytime, but it is recommended to start all together from the beginning

# Areas of activities and working groups

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- in COST Action we usually have (but it is not mandatory):

**ALGORITHMS**

**DATABASES**

**APPLICATIONS**

**ASSESSMENT**

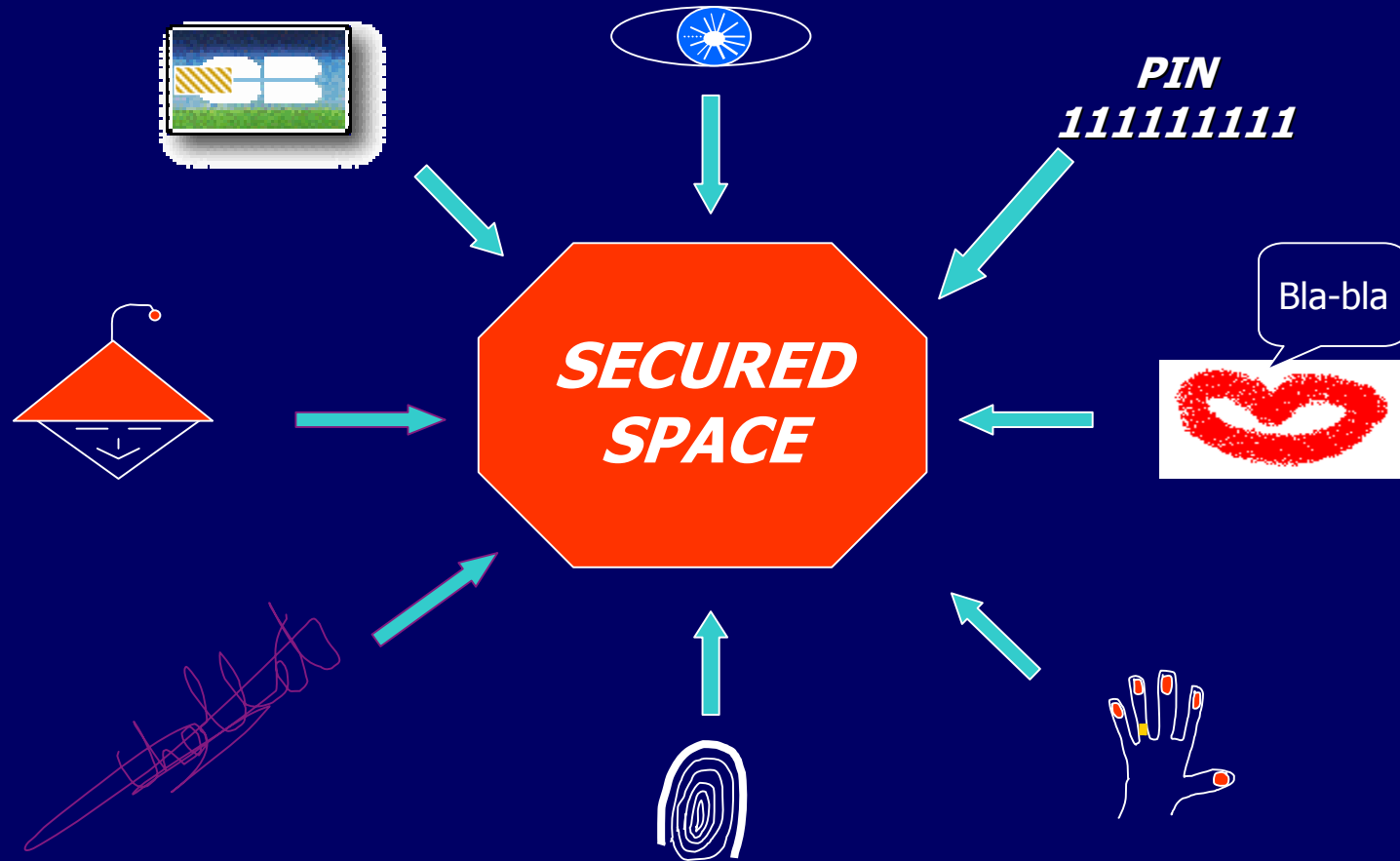
# KEY points in COST275

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- MULTIMODAL BIOMETRIC IDENTIFICATION  
(speech, face, fingerprint, signature.... any other you need)
- INTERNET as communication channel (not only telephone line)
- Create a cooperative framework to share experiences, ideas, software, collect data, perform comparative evaluation, organise workshops, etc.



# COST 275 possible modalities



# **Why to join the Action NOW ?**

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- **You may contribute to the definition of the research activities in the Action**
- **You will have the occasion to meet researchers that have same interests and problems**
- **You will contribute to the 'European' visibility of the research in that area**
- **Official members have financial (travel) support from EU**

# Contact point

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**falcone@fub.it**

- **A COST275 web page will soon be available**
- **Contact your National COST representative**
- **The COST275 MoU is available at**

**<http://tsi.enst.fr/~chollet/COST/275>**

# COST 277



- Nonlinear Speech Processing

# COST 278

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- **COST 278**  
Spoken Language Interaction in  
Telecommunication

# NIST Speaker Recognition Evaluations

## ⌘ Evaluation driven research and progress assessment

- ⌘ Sponsor's challenges
- ⌘ Task definitions (George D. & Doug R.)
- ⌘ Evaluation plan (~George D.)
  - ⌘ Core task; 1 speaker detection; application independent
  - ⌘ New tasks
- ⌘ Corpora to support evaluation of tasks
  - ⌘ Collection and management (LDC, you?)
  - ⌘ Assembly and distribution by NIST (~Mark P.)
- ⌘ Evaluation (usually blind test) by NIST (~Alvin M.)

## ⌘ Open to "participants" (and sponsors)

## ⌘ International friendly cooperative evaluation

- ⌘ Dozen participants; Elisa...

**Speaker Odyssey Discussion  
“International collaborations”**

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**Discussion**

# Discussion

## ⌘ Subjects of collaborations

- ☒ Evaluation!

- ☒ Share development efforts  
("free" software/resource)!

- ☒ Provide access to resources  
Provide communication tools (electronic letter)

- ☒ New resources!

  - ☒ Corpora

- ☒ Provide an access point for other researchers (companies)

- ☒ Define the "hot" topics and emphasize topic-relative research

- ☒ ...

## ⌘ How to increase/manage the collaborations ?



# Evaluation

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- ⌘ Core = NIST
- ⌘ Extend NIST evaluations
  - ☒ Different objectives
  - ☒ Different scoring using same data
  - ☒ Different applications using same data
  - ☒ Example = segmentation/indexing/information retrieval
- ⌘ New tasks (forensic?)
- ⌘ Find new data
- ⌘ Find the money for new data!
  - ☒ EC?
  - ☒ Company?

# Sharing/Saving development efforts?

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- ⌘ We have the resource!
- ⌘ The problem is “how to share it?”
  - ☒ Collaboration/competition?
  - ☒ Protect the intellectual propriety?
  - ☒ Who manages these problems?
- ⌘ LDC/ELRA/GNU models?
- ⌘ SPLC: is it a good structure?

# Others

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- ⌘ Provide access to resources
  - Provide communication tools (electronic letter)
- ⌘ New resources!
  - ⌘ Corpora
    - ⌘ Cellular - More phases of Switchboard
    - ⌘ VoIP
    - ⌘ DARPA Meeting Task (NIST, ?)
    - ⌘ Forensic (FBI, Italian Police, ?)
- ⌘ Provide access point for other researchers (company)
- ⌘ Define “hot” topics and emphasize topic-relative research
- ⌘ ...

# How to increase/manage the collaborations?

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- ⌘ Do not duplicate the efforts!
- ⌘ Find work power!
  - ☑ Few people making major efforts
  - ☑ Many people can make contributions with minor effort
  - ☑ Both!
- ⌘ Find money!



And what could we do  
about baggages ?????