



# The Ubiquity of Digital Audio Processing

**FEEVER: Faust Environment Everywhere.**

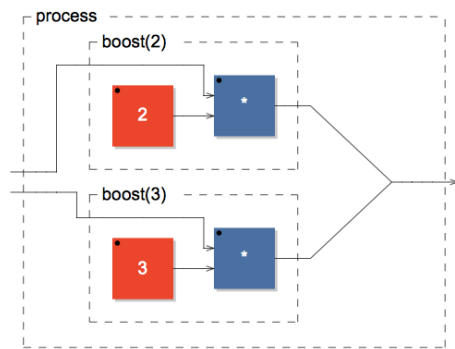
**Design, implementation and validation** of innovative technologies for everywhere seamless **audio processing**:

- Portability;
- Programmability;
- Ease of deployment;
- Efficiency;
- Security.



*Turenas Live, Stanford University, 2014*

```
boost(p) = _, p : *;  
process = _, _ : (boost(2), boost(3)) >: _;
```



**Faust, the audio programming language:**

- Audio end user-focused;
- Compiled vs. interpreted;
- Specifying DSP at a high level;
- Functional and text-oriented;
- Adaptable to many audio architectures.



# Sounds Everywhere....

**Ambitious R&D goals** for a comprehensive solution to audio processing, distribution and playback on all platforms (internet, mobile devices, specialized hardware...):

- **Theory** (formal semantics, proofs);
- **Compiler** optimizations;
- Extension of **audio architectures**;
- **Education** content.



*OWL Pedal*



*MoForte Guitar*



## FEEVER team:

- MINES ParisTech (lead, Paris);
- GRAME-CNCM (Lyon);
- CIREC (St-Etienne);
- IRISA (Rennes).

