

*symbolic authoring tools      generative algorithms*  
*emergent algorithms / swarms*  
*Holo-Edit      ICST ambimonitor/ambicontrol*

### **Authoring / Render-Control**

*SpatDIF      virtual sound source positions*  
*room effects*

### **Audio Scene Description**

*DIRAC      Ambisonic B-Format      MPEG Surround*

### **Encoded Audio Format**

*CoreAudio      Jack      Port Audio*  
*ALSA      OSS*

### **Decoded Audio Format**

*computers      sound cards      loudspeakers*

### **Physical Devices**