The advent of electronic instruments, amplification, and recording at the start of the twentieth century, the explosion of pop music in the post-war period, and the digital revolution at the turn of the millennium have deeply changed the world of music. Indeed, these innovations have impacted every type of musical practice and sparked the birth of new creative processes.

Considering this phenomenon from a historical perspective, the “Lutheries Electroniques” conference—organised by the Cité de la musique-Philharmonie de Paris in partnership with the Sorbonne University’s Collegium Musicae institute—examines the latest developments in electronic instrument-making and associated interactions with traditional instrument-making, in the aim of bringing forth new methods for exploring these instruments at the interdisciplinary junction between organology, the archaeology of techniques, the history of ideas, and aesthetics.

The production of electronic instruments poses certain problems in terms of conservation, which, thus far, have not been satisfactorily resolved, largely because the materials and electronic components, and how they are composed and arranged, adhere to processes whose foundation—and, moreover, kinetics—are not well-determined. From a musical heritage perspective, what policy choices for acquisitions, conservation, and restoration can counteract the problem of obsolescence? Is maintaining instruments in playing condition an impossible goal? In the museography of sound, what approaches are now being developed (through distributed sound delivery systems, for example) to exhibit these technological innovations?

Are the audio identity of such sources and the repertoires they have given rise to at risk of extinction? As there has been little study of this field, there are significant gaps in the literature: the longer ago these objects were created, the fewer of their designers remain to recount how they emerged. However, in spite of obsolescence, current use of audio technologies, especially in popular music genres, shows an ability to survive and continuous explorations drawing on the sound culture of a recent past. The status of “modern relics” sometimes accorded to electronic instruments—a symptom of the vintage or neo-retro trend—makes them already the subject of a form of media archaeology.

The role that digital technology can play in preserving and updating this instrumentarium (through the digital modelling of electronic designs, for example) has been tried and proven since the development of computer music. However, the impact of hybridisation between digital, electronic, and traditional instrument-making, the emergence of new forms of instrument-making (gesture control, augmented instruments, etc.), and, more generally, virtualisation in sound production processes, still remains to be defined. The sociological panorama of the electronic music sector also merits study, taking into account the new faces it has come to represent (inventors, developers, engineers, producers, etc.) and the role of “the human” in these hybrid practices, as “the machine” prompts us to revisit the very notions of instrument and musician.

Possible themes for talk proposals include:

1. **Early electronic instruments:** How to frame the story of the advent, expansion, and sometimes decline and disappearance of primitive electronic instruments (theremin, ondes Martenot, traumtonium, etc.)? How do they fit into the history of the twentieth century, not only in music, but also in technological, historical, and cultural contexts?

2. **Industrial archaeology of instrument-making:** What are the keys to understanding the processes of re-appropriation or, on the contrary, imitation (in contact with acoustic instruments) that led to the invention of certain instruments? What can be said about the reproducibility of manufactured objects, which, although popularised by their progressive industrialisation, often bear the singular mark of those who play them?
3. Conservation/restoration of electronic instruments: What strategy(ies) to adopt in response to the technological obsolescence to which electronic instruments are prone, given the lack of documentation concerning them and the “dying out” of the know-how that led to their creation? How are these instruments to be conserved and exhibited? Should they be treated as “art objects”? What does the current interest in preserving these long marginalized instruments indicate or reveal?

4. An electronic repertoire? “Electro” works/“Electro” culture: Explorations in sound through electronic and computer music have seeped into every type of musical creation, from avant-garde to popular music genres. Is there overlap in the formal approaches pulsing through acousmatic studios, underground festivals, and urban dance floors? What explorations, aesthetic ideas, and cultural movements connected to machines and urban practices, for example, can be seen in these forms of production? Which forms of music appreciation or “listening cultures” are integrated into electronic instrument-making?

5. From electronic to digital: How is the electronic modelling of electronic designs useful in preserving the electronic instrumentarium? What are the associated challenges, pitfalls, successes? Also, how can we measure the effect of the global distribution of computer composition, sampling, and sound transformation tools? Has computer sound transformation become a sort of “hyper-instrument”, the master of all sounds?

6. Evolving towards music without instruments? How is electronic music produced in the world today, and by whom? How are we to interpret the relationship between the sophistication of computer programmes and artists’ fondness for the “grain” obtained with analogue devices? Is this what could be called the “re-materialisation” of music?

Organising committee: Thierry Maniguet, Benoît Navarret, Marion Platevoet, and Agnès Puissilieux

Scientific committee: Marc Battier, Pierre Couprie, Hugues Genevois, Thomas Hélie, Jean-Yves Leloup, Emmanuel Parent, Nadia Ratsimandrésy, Stéphane Roth, and Matthieu Saladin

Duration of talks: 20 minutes

Conference languages: French and English

Proposals (2000 characters abstract), in French or English, must be submitted to colloques@philharmoniedeparis.fr with a short bio (800 characters maximum) by 6 December 2017. The candidates selected by the scientific committee will be announced in January 2018. To encourage the participation of young researchers who are not necessarily affiliated with research institutions, assistance with travel expenses can be considered for selected candidates.

Through its artistic programming as well as its cultural, educational, and editorial activities, the Cité de la musique-Philharmonie de Paris contributes to the development of music, musical practice, and knowledge and appreciation of music and musical heritage. It is home to the Musée de la musique, which combines instrument conservation, scientific research, interaction with musicians, and public events.

The Sorbonne University’s Collegium Musicae, directed by Cécile Davy-Rigaux, comprises ten leading research and training entities internationally recognised in the field of music.