



# **CIRMMT USER'S GUIDE**

June 2023













# **CIRMMT USER GUIDE**

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## **ABOUT CIRMMT**

**CIRMMT**, the Centre for Interdisciplinary Research in Music Media and Technology, is centred at the Schulich School of Music of McGill University. It unites researchers and their students from several Quebec institutions - McGill University, l'Université de Montréal, l'Université de Sherbrooke, École de technologie supérieure, Concordia University, INRS and Marianopolis College. The CIRMMT community also includes administrative and technical staff, research associates, visiting scholars, musicians, and industrial associates. CIRMMT occupies a unique position on the international stage having developed intense research partnerships with other academic and research institutions, as well as diverse industry partners throughout the world.

**CIRMMT** is a multi-disciplinary research group that seeks to develop innovative approaches to the scientific study of music media and technology, to promote the application of newer technologies in science and the creative arts, and to provide an advanced research training environment. The CIRMMT community is interested in research that spans a wide range of topics from the creation of music in the composer's or performer's mind, the performance of music, its recording and/or transmission, and the reception of music by the listener. It is also interested in the ways in which vision, haptics, and touch interact with music and sound.

### **Communal Labs**

McGill University's Schulich School of Music has granted CIRMMT 720 m<sup>2</sup> of space on the eighth floor of the Elizabeth Wirth Music Building with offices and laboratories. The offices house the Centre's administration and technical services, as well as visiting scholars. The remaining office space is allotted on a rotating, time-limited basis to researchers for specific collaborative projects.

CIRMMT's central laboratories are a shared resource for interdisciplinary, collaborative research projects and are available to all members of the Centre. There are seven laboratories (six on the 8<sup>th</sup> floor and one on the -2 floor of the Elizabeth Wirth Music Building) that have been designed with specific acoustic characteristics in order to maximize the variety of functionalities of the available research spaces. CIRMMT members also have access to the MMR which is a shared space with the Schulich School of Music.

### **Funding Opportunities for Members**

CIRMMT offers several funding opportunities to members for interdisciplinary, collaborative research within the Centre's mandate. For more information on funding opportunities (for travel, research projects, internships at other institutions and outreach) visit our website: <a href="https://www.cirmmt.org/en/funding">https://www.cirmmt.org/en/funding</a>

### **Research Program**

CIRMMT's research program is organized into four axes, with working groups coordinated by team leaders. Each axis has one or two leaders and student coordinators, representing different partner institutions when possible. Although members are primarily affiliated to one axis, each axis encompasses several research disciplines, and many members participate actively in several axes.

For more details on the research axes, please visit our website: <a href="https://www.cirmmt.org/en/research/axes">https://www.cirmmt.org/en/research/axes</a>

### **ACCESS TO CIRMMT FACTILITIES**

CIRMMT's central facilities are located on the 8<sup>th</sup> floor of the Elizabeth Wirth Music Building (EWMB), McGill University, 527 Sherbrooke St. West, Montreal. If the front door of this building is locked enter via Strathcona Music Building (555 Sherbrooke St. West) and turn right. At the end of the corridor, go through the passerelle to the right that leads to the Elizabeth Wirth Music Building. Once in the EWMB, elevators are on your left.

All CIRMMT Regular, Collaborator and Student members have access to CIRMMT premises (reception area, kitchen, photocopier, student computer lab) at all times. There are two entrances to the Centre on the 8<sup>th</sup> floor, both of which have card readers. The first entrance is directly in front of the elevators. The second entrance is to your left when exiting the elevators.

McGill University students and faculty can use their McGill ID cards to get into the Centre. Members from other institutions must obtain a CIRMMT ID card from Centre staff. This ID card is free, but if lost, there is a non-refundable fee of \$20 for a replacement.

Members can obtain ID cards at CIRMMT Monday-Friday but should arrange when to pick up the card by contacting the Research Centre Administrator in advance.

**Card reader access is for members only** – please do not let anyone who is not involved in your research project into the Centre (with the exception of experimental subjects). Remember that all card reader doors have a silent alarm that is activated if the door is left open for any length of time. Do not prop open any card reader doors.

### **Lab Access**

All seven central CIRMMT labs have card readers. When members make lab bookings, the ID cards of all members listed in the booking are activated for the lab at the booking start time.

## **Poster Printing**

This service is a bonus intended for CIRMMT members and students only and must be related specifically to CIRMMT research and contain the CIRMMT logo.

It should **not** be used by non-members: we therefore request that you do not invite others outside of CIRMMT to contact us to use this service. There are various professional services around the downtown campus that can be used, as well as McGill Ancillary Services: <a href="https://www.mcgill.ca/ancillary/services/printing">https://www.mcgill.ca/ancillary/services/printing</a>

Please also remember that we are not a professional printing service! We will always do the best we can to accommodate our members, but if you require urgent, or a completely professional, service, please use one of the above-mentioned facilities.

## **CIRMMT POLICIES AND PROCEDURES**

The policies for the Centre can be found on the website on the Policies, Documents and FAQ page: <a href="https://www.cirmmt.org/en/membership/policies-documents-faq">https://www.cirmmt.org/en/membership/policies-documents-faq</a>

These include the following, and are updated as necessary:

- By-laws
- Laboratory Allocation Policy and Procedures
- User Guide
- In-kind support and user fee policy for grant applications
- User fees policy for Regular Members

### **CIRMMT COMMON AREAS**

## **Lounge Area**

A lounge area near the front desk is available to CIRMMT members.

### **Kitchenette**

There is a kitchenette available to all CIRMMT staff and members – please be sure to keep the area clean. The kitchenette is stocked with glasses, utensils and cleaning supplies, coffee and tea, milk and sugar. We ask a contribution of \$1 per hot drink that can be placed in the money jar on the kitchen counter.

The fridge is very small so perishables left in there for more than two days will likely be thrown out. There is also a microwave for your use. *Food and drinks are not allowed in the CIRMMT labs.* 

## **Photocopier**

There is a photocopy machine on the 8<sup>th</sup> floor that is available to CIRMMT members. For those who do not have a McGill ID and wish to use the photocopier, please see the CIRMMT Administrator.

### Washrooms

The washrooms are located outside of CIRMMT. When exiting the elevators on the 8<sup>th</sup> floor of the Elizabeth Wirth Music Building, they are down the hall to the left.

### **Coat and Boot Racks**

There are coat racks and boot trays located in the reception area of CIRMMT. Please leave all outside clothing and shoes there. *This is particularly important during Winter or on rainy days, so that the lab floors and equipment remain clean and dry.* 

### **Public Phone**

The phone in the reception area can be used for short local calls (please keep these to a minimum from 9:00am to 5:00pm).

CIRMMT cannot take messages for members working in the labs, unless it is an emergency.

## **RESEARCH LABS**

The Lab Allocation Policy and Procedures document is available on the CIRMMT website and should be reviewed by members wishing to make bookings: <a href="https://www.cirmmt.org/en/about/lab-allocation-policy">https://www.cirmmt.org/en/about/lab-allocation-policy</a>

### About the Labs

## 8th floor & -2 floor laboratory suite

CIRMMT's seven central laboratories (8th floor & -2 floor, Elizabeth Wirth Music Building) are a shared resource available to all members of the CIRMMT community for interdisciplinary, collaborative research projects. Due to the Centre's research mandate and CFI restrictions, CIRMMT laboratories may not be used for recurrent teaching purposes. In addition, labs cannot be used for regular rehearsals, master's thesis composition or practice. Special priority is given to collaborative research projects involving two or more CIRMMT researchers from different disciplines. Activities **not** linked to CIRMMT projects led by a CIRMMT regular member cannot lead to extended or repeated bookings.

The seven labs were designed as complementary research spaces, with the highest quality acoustic specifications and equipment available. Each lab is designed to accommodate a range of research within the Centre's mandate, and together they offer a unique support for interdisciplinary projects bridging several areas and that are impossible to carry out in members' individual satellite labs.

- Lab 1: A816, Spatial Audio Lab: Hemi-anechoic room treated with RPG absorptive panels. Applications for use include spatial acoustic rendering, acoustic measurement.
- Lab 2: A817, Critical Listening Lab: ITU-R BS.775-1 standard room with stereo and 7.1 surround. Applications for use include critical listening, evaluation, audio stimuli preparation.
- Lab 3: A818, Performance and Recording Lab: Adjustable acoustic (absorption or diffusion on one wall). Applications for use include recording of individual performers, small motion capture setups.
- Lab 4: A821, Audiovisual Editing Lab: Multimedia lab dedicated to video editing, live video control & AR/VR experiments.
- Lab 5: A820, Immersive Presence Lab: Adjustable acoustic with speaker mounting grid. Applications for use include audio, video, vibration capture and restitution, motion capture.
- Lab 6: A822, Perceptual Testing Lab: Perceptual Testing workstation for headphones and 5.1 surround. Applications for use include music and sound perception experiments, audio editing.
- Lab 7: A016, Performance Research Laboratory (PeRL): High Order Ambisonic setup: dome of 37 Genelec 8030, 4 subwoofers.

## Private workspace

• In addition to this, there is a CIRMMT student computer lab with up to five workstations. While this space is intended primarily for student use, all members have access to the room and its computers.

• There is also bookable shared office space (desks within room A823) available to all members. These desks can be booked via the booking site.

## Open workspace

The hallway, kitchen and reception area are considered open workspace and can be used by any
of the members and their guests.

## Multimedia Room (MMR)

The MMR is a large-scale research facility with variable acoustics for the scientific study of live performance, movement of recorded sound in space, and distributed performance. This unique infrastructure enables the development of technologies at the core of these areas of study, as well as on cognition and perception in musical performance. Large-scale multi-channel sound systems are used for musical and perceptual research and large ensemble performance analysis. The space may also be used as a world-class recording studio. To request this room, please go to the CIRMMT booking site and ensure to follow the booking and usage policy and complete the request form.

### Satellite laboratories

These labs are located at our partner universities and while not for general use, our members can contact them for special arrangements.

- HexaGRIS studio, Université de Montréal: (located at Université de Montreal: B-188-1) This composition and research studio is equipped with a 16 + 2 speaker system setup in the shape of a dome and includes several control surfaces and related audio equipment. This resource is available to the CIRMMT community and is booked through the Université de Montréal (CIRMMT members should contact Robert Normandeau for more information).
- Université de Sherbrooke Groupe d'Acoustique de l'Université de Sherbrooke (GAUS): (located in department of Mechanical Engineer: 2500 Blvd de l'Université Sherbrooke) GAUS has essentially one common laboratory space where researchers share various equipment. The facility is intended for acoustics and vibration measurements with corresponding acquisition systems and electronics, and includes: a) fully anechoic room, b) hemi anechoic room coupled to a reverberant chamber, c) anechoic wind tunnel coupled to the anechoic room, d) Wave Field Synthesis facility installed in a dedicated room, e) acoustic materials characterization lab, f) ultrasound lab. (CIRMMT members should contact Nicolas Quaegebeur for more information about the facility)
- École de technologie supérieure (ÉTS) Infrastructure commune en acoustique pour la recherche (ICAR): (located in the main ÉTS building) ICAR is a research and training laboratory focused on industrial acoustics. Created in collaboration with the Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST): the laboratory is equipped with: a) coupled semi-anechoic and reverberant chambers, b) audiometric booths, c) equipment for the characterization of acoustical materials, d) equipment for acoustic imaging. (CIRMMT members should contact Olivier Doutres for more information about the facility).

# Using the Labs (please refer to the complete lab allocation policy found online <a href="https://www.cirmmt.org/en/about/lab-allocation-policy">https://www.cirmmt.org/en/about/lab-allocation-policy</a>)

 All CIRMMT members can book labs for interdisciplinary, collaborative research, either through the online booking system (<a href="https://booking.cirmmt.org">https://booking.cirmmt.org</a>) or by contacting the technical staff (cirmmt.tech@mcgill.ca).

- CIRMMT labs are allocated on a per-experiment basis.
- Regular members can book for a maximum of two months per booking.
- Collaborators and visiting researchers are, in principle, required to be linked to collaborative projects conducted by Regular members.
- Activities not linked to CIRMMT projects led by a CIRMMT regular member cannot lead to extended or repeated bookings. Bookings can be made for a maximum of 2h/week which can be accumulated so that 1 day/month or +/- 12 days/year can be booked at one time.
- Bookings of the laboratories are reviewed by the technical staff and moderated by the Directors, whose goal is to implement an equitable use of the space.
- To ensure maximum laboratory availability for the Centre's membership, members are asked
  to notify the Centre's staff when a reserved space will not be in use, so that the labs can be
  made available to others. Members who repeatedly fail to cancel unnecessary space
  reservations may have their booking privileges constrained.

All lab doors have card readers, for which your ID card is activated at the start time of your lab booking.

All lab booking requests are made via CIRMMT's online booking system: <a href="https://booking.cirmmt.org/items/labs/">https://booking.cirmmt.org/items/labs/</a>

You will require your username and password to access this site.

For complete information on the following issues, please look for the 'Information' menu found on the left-hand side of the booking site: <a href="https://booking.cirmmt.org">https://booking.cirmmt.org</a>

- Site Navigation (How to use the online booking system)
- Assessment of you booking request
- CIRMMT equipment allocation policy
- Off-site equipment loan agreement
- Reporting equipment malfunctions

You will receive an automated email indicating that your request has been submitted. All bookings that include technical assistance of any kind (including use of CIRMMT equipment that is not part of the default configuration of the lab) are dependent on the availabilities of the technical staff.

### **Technical Assistance**

Technical staff are available during normal business hours (9:00am to 5:00pm, Monday to Friday). If a booking request involves technical setup and special equipment, the technical staff will meet with you to discuss your project, make sure that there is enough time for setup/breakdown and that the equipment selected is appropriate for your experiment. Please make an effort to keep CIRMMT's technical staff informed in as much detail as possible, as far in advance as possible, of any changes to technical requirements that may be necessary during your lab booking.

### **User Fees**

Since June 30 2020, all CIRMMT **Regular** members are required to contribute user fees (formerly membership fees). There are two categories:

- Administrative User fees: all members must contribute this minimum amount of \$100.
- Research User fees: additional variable fee based on the usage of the Centre's facilities and equipment.

For the policy and full information, please view the PDF (in English only) on our website: <a href="https://www.cirmmt.org/en/membership/user-fee-policy">https://www.cirmmt.org/en/membership/user-fee-policy</a>

#### **Environmental Control**

Lab temperature and humidity levels are maintained by McGill and large variations are possible, especially in the seasonal transition periods. Temperature is generally adjustable at the local level, but humidity levels are not. For experiments requiring stable environmental conditions, please consult with CIRMMT staff to determine the most appropriate time for your project. Any projects requiring critical environmental control may not be appropriate for the CIRMMT labs.

### **Lab Safety**

All CIRMMT members must take an introductory orientation workshop to learn about the CIRMMT labs and resources before using the labs. In some cases, members must take accreditation workshops in order to be eligible to use the default systems in the labs.

Please note that the lab doors are acoustically massive and can be difficult to close. Please ensure they are both locked and latched when you leave! It may require some muscle.

### **Emergency or Injury**

In case of an emergency or injury, dial 911 and call Campus Security Services at 514-398-3000 (ext. 3000 if you're using a McGill phone).

There is a First Aid kit located in the CIRMMT kitchenette, in the bottom drawer.

### Fire

In case of fire in a lab:

- 1. Evacuate the lab immediately. If your exit is blocked, use the fire extinguisher located in the lab to clear an exit path. Instructions on use are below. DO NOT try to fight the fire if your exit is not blocked. Toxic fumes may be emitted by burning equipment or acoustic treatment even if the fire is small.
- 2. If it is safe to do so, close the lab door after all persons have evacuated the lab.
- 3. If you do not already hear an alarm, pull the fire alarm located in the halls.
- 4. If you can, assist other persons who need help getting to the stairwell.
- 5. Evacuate the building. There are two stairwells: one inside CIRMMT and one outside.
- Call 911 and Security Services at 514-398-3000 as soon as possible. Tell them the location of any persons with special needs who are in the stairwell, or of any injured persons who are still in the Centre.
- 7. Do not re-enter the building until authorized by the fire department or building evacuation team.

If you do fight a fire, remember the acronym "PASS" when using the extinguisher:

- P: Pull and twist the locking pin to break the seal.
- A: Aim low and point the nozzle at the base of the fire.
- S: Squeeze the handle to release the extinguishing agent.
- S: Sweep from side to side until the fire is out.
- Be prepared to repeat the process if the fire breaks out again

## **Power Outage/Evacuation**

In the case of a power outage, emergency lights will come on in various areas of CIRMMT.

Evacuation procedures:

- 1. Assist persons with special needs.
- 2. Evacuate the building. There are two stairwells: one inside CIRMMT and one outside. DO NOT use the elevators. Stay calm.
- 3. Move 100m from the building, or to the location specified by the building evacuation team.
- 4. Do not re-enter the building until authorized by the evacuation team or Campus Security.

## **Experiments with Human Subjects**

Researchers working with human participants must obtain proper certification before research may begin. The ethics certificate number must be submitted when a booking is placed via the CIRMMT booking site.

Research projects carried out in CIRMMT's central labs that involve McGill members, including Visiting Academics to McGill, must comply with the McGill University research ethics policies: <a href="https://www.mcgill.ca/research/research/compliance">https://www.mcgill.ca/research/research/compliance</a>

Research projects carried out at CIRMMT by **non-McGill members**, must submit their institution's ethics certificate number when placing their laboratory booking via the CIRMMT booking site.

CIRMMT members conducting experiments with non-member participants must ensure that no participants are left unaccompanied at the Centre. Members are directly responsible for these participants and their actions while at CIRMMT.

Members who are conducting experiments with non-member subjects should provide the CIRMMT lab name and lab/control station phone numbers to all participants. When experiments take place during reception hours, participants can access the lab through the reception area. When experiments take place outside of reception hours, non-member participants can use the hall phone (to the left of CIRMMT's front door) to contact the researchers in the lab or control station and be admitted into the Centre.

## **Dissemination of Research Findings & Acknowledgements**

It is expected that when CIRMMT labs are used in a research project, CIRMMT will be listed as part of the institutional affiliation in any publication. Example: "CIRMMT, Department X, University Y."

As this is not possible for certain journals, which only list the university, use of CIRMMT labs should be recognized in the acknowledgements section with the following:

- We would like to thank the Centre for Interdisciplinary Research in Music Media and Technology (CIRMMT) for their support.
- Nous tenons à remercier le Centre interdisciplinaire de recherche en musique, médias et technologie (CIRMMT) pour son soutien.

The CIRMMT logo should be attached to documentation when possible. You can find our logo on our website: <a href="https://www.cirmmt.org/en/about/media">https://www.cirmmt.org/en/about/media</a>

## **RESEARCH EQUIPMENT**

## **About the Equipment**

All equipment purchased on CIRMMT operating grants (with the exception of specific equipment bought on CFI-2 for use in satellite labs) is housed at the Centre and is available for use by all members of the CIRMMT community.

## **Default Lab Equipment**

Some of the Centre's equipment is permanently installed in the six research labs, the student computer lab and the lab control stations. An updated, detailed list of the default equipment is available on the CIRMMT website and the lab booking website: https://booking.cirmmt.org/items/labs/

## **Loan Pool Equipment**

Equipment that is not part of the default lab configurations is available for loan to members, either for use at CIRMMT or for temporary use off-site. Members can use loan-pool equipment for research, demonstrations or CIRMMT concerts. All equipment loan pool requests are assessed by CIRMMT's technical staff.

As equipment is purchased, system details and user manuals will become available on the online booking system.

### **On-Site Loans**

In order to reserve equipment for use in a CIRMMT lab, you must have an active lab booking during the period requested. The technical staff (or delegate) will install and remove the loan pool equipment from the lab at the times confirmed in the booking. If you've made an on-site booking, you must not remove the loan pool equipment from the lab at any point during your booking.

### **Off-Site Loans**

## NB: This is not available to Collaborator members or visiting researchers.

Off-Site loans include loan pool equipment that is borrowed for use outside of the central CIRMMT labs. Once the equipment leaves the premises, you are entirely responsible for it. Much of this equipment is extremely costly, so please read all loan terms and conditions very carefully before borrowing the equipment.

While you can request off-site equipment up to the last minute, there is no guarantee that your request will be approved.

The off-site loan agreement form must be signed. If equipment is lost, damaged or stolen off-campus, the member who signed the loan documents is responsible for paying the insurance deductible. In the case of McGill insurance, the deductible is \$1,000. If negligence is proven and insurance coverage no longer applies, the member who signed the loan documents will be held responsible for the full cost of equipment repair or replacement.

## **CONTACT INFORMATION**

## Staff/Facilities

Staff	Local Tel.#	Room#
Jacqueline Bednar: Research Centre Administrator	514-398-2464	A828
Julien Boissinot: Systems Manager	514-398-3688	A828
Darko Dimitrijevic: Events Administrator (PT)	514-398-8793	A812
Fabrice Marandola: Director	514-398-6670	A830
Yves Méthot: Electronics Coordinator	514-398-4745	A827
Sylvain Pohu: Production Manager (PT)	514-399-9304	A827
Other		
Conference Room	514-399-9294	A807
Public Phone (CIRMMT lounge)	514-399-9296	A812

## **Delivery/Mailing Address**

CIRMMT Schulich School of Music, McGill University 527 Sherbrooke Street West, room A812 Montreal, QC Canada H3A 1E3

## **Emergency**

In case of emergency or injury, dial 911 and call Security Services: 514-398-3000

Non-emergency assistance:

During regular office hours, contact CIRMMT staff.

McGill non-emergency phone numbers:

Environmental Health & Safety 514-398-4563

Emergency Measures & Fire Prevention 514-398-3473

Security Services (Lost & Found) 514-398-4556

Waste Management 514-398-5066

McGill anonymous information hotline: 514-398-TIPS (8477)

Office for Sexual Violence Response, Support and Education (OSVRSE): 514-398-3954