Risk Assessment for Returning to Work during the Covid-19 Lockdown Easing Period

Department/ Group/Team	Ultrafast and THz Photonics	Date of assessment	13/10/2020
Building	MAS, Physics	Reduced Occupancy Level (Maximum)	**3 for MAS 3.18; 2 for P1.53.** Managers should consult their Estates Building Manager regarding 'reduced' occupancy figures (where applicable) in order to determine how many people can safely use each space. This should be used as an initial guide alongside knowledge of the space itself. Consultation may also be required with other managers who share the space or with Health and Safety Services.
Space(s) in use	MAS3.18 (01.284.L02.028) P1.53 (01.042.000.022)	Number of People	**11**

'Critical Activities' to be carried out	**Critical Activity** – As listed below, there are a number of critical activities linked to work in these labs. Initials refer to the following staff & students: **Group leaders/PIs:** James Lloyd-Hughes (JL), Rebecca Milot (RM) **PDRA:** to be appointed to work with RM (PDRA-RM) **PhD students:** Jake Hutchinson (JH), Folushuo Balogun (FB), Eric Hu (EH), Edward Butler-Caddle (EBC), Junn Keat (JK) **MSc by Research students:** Justas Deveikis (JD) **BSc students:** Thomas Rates, Ben Wellavize
	1. Externally funded laboratory research activity (and the lab support services it relies on), including UKRI or similarly funded work, RTP activities, or work funded by industrial partners or similar sponsors. **ERC Horizon 2020 FET-OPEN grant BoostCrop (JL)** **EPSRC New Investigator grant (RM)** 2. Research required to prepare for (or bid for) future externally funded laboratory research activity (and the lab support services it relies on). **Research projects of a staff member on academic probation (RM) and her group (FB, JH, PDRA-RM)** **Research projects underpinning an EPSRC Programme Grant bid (PI: Emma MacPherson, CoI: JL)**

	Research projects underpinning an EPSRC Responsive Mode bid (PI: JL)
	3. Laboratory based PhD student projects. **EPSRC DTP (EBC, FB, JH)** **China Scholarship Council studentship (EH)** **Diamond CDT (JK)**

Line Managers carrying out the assessment	**James Lloyd-Hughes, Rebecca Milot** Further information on Risk Assessment, Covid 19 and general health and safety are available at: https://warwick.ac.uk/services/healthsafetywellbeing/managingrisks/ https://warwick.ac.uk/services/healthsafetywellbeing/a-z/healthandsafetyguidanceoncovid19 There is also a Risk Assessment Moodle training module available via Warwick's MyMoodle. If you require support or advice on completing this form please contact your Health and Safety Officer or Health and Safety Adviser: https://warwick.ac.uk/services/healthsafetywellbeing/contacts/
Staff supporting assessment process	**Based on Risk Assessment for WCUS (MAS 2.11); Physics Safety Officer (John Horsler).**

Additional Information

Staff should not be coming into work unless the work is deemed a 'critical activity' by the University.

For 'critical activities', managers need to examine the spaces that they require people to work in and determine how they can manage the risks associated with Covid-19 in that space and connected with the work involved. Not all tasks need to be completed on campus and staff must only come to campus if they cannot do the work from home, and only then to complete the essential tasks before going home to continue working from there for the rest of the day/week. Managers should be minimising the amount of time they or their staff need to be on campus.

Limiting Durations of Work
Time spent with others, as well as distancing, is an important control measure. People might only need to come to campus to complete their 'critical activity' tasks and then could go home to continue working from there for the rest of the day/week. Wherever possible managers/supervisors should be minimising the amount of time they or their staff need to be on site.

Meetings
Meetings should only be held if absolutely necessary, and should be held as on-line meetings, even if some or all of the participants are on campus. Where this is not possible meetings must be held where 2 metre distancing can be maintained and preferably in a well ventilated space or outdoors.

Other Risk Assessments
Risk assessments already in place (for work activities, chemicals, biological agents, work equipment, etc.) are still applicable and must complement the risks and risk control measures covered in this specific risk assessments. These risks need to be assessed jointly and a holistic approach to ensuring the health and safety of individuals adopted.

Further information
Refer also to the Standard Operating Procedure for staff returning to work to carry out 'Critical Activities' during Covid-19 lockdown easing period, which is included at the end of this assessment.

Hierarchy of Control Measures to be used (these are listed in order of priority, but a combination of controls may be required)		Control Measure (Please answer the questions in this column)
Eliminate	Any staff reporting that they are unwell with symptoms of Coronavirus (Covid-19) must be told not travel to or attend the University. Their sickness absence should be recorded within the University HR System SuccessFactors. Testing is available for any members of staff deemed to be required to come to work by the University for 'critical activities'. Staff with symptoms must be told to self-isolate, as should staff with members of their household who are showing symptoms, until testing confirms that it is not Covid-19 (see University Covid-19 testing guidance) or the relevant time period has elapsed. If a member of staff does fall ill, then the space in which they were working should be left empty and well ventilated for at least 72 hours and extra cleaning be arranged with Cleaning Services by the manager. Staff who are in the 'extremely vulnerable' group (have received a specific letter from the NHS) are shielded and must not come to work. Staff in the vulnerable' group need to follow the strictest levels of '2 metre distancing', and, although they can come to work, they should be encouraged to continue working from home or to stay at home. **Meetings on campus** Meetings should continue to be held as on-line meetings, even if some or all of the participants are on campus. Where this is not possible meetings must be held where 2 metre distancing can be maintained and preferably in a well ventilated space or outdoors. DO NOT invite visitors to come to campus, other than contractors who need to attend to equipment or systems required for a critical activity.	Does your workforce need to come onto campus to carry out this critical work or can they continue to work from home? **Experiments require some of the workforce to be on campus.** Have staff been fully informed of the needs for self-isolation should they have any symptoms whatsoever? **Yes.** Have staff who are 'extremely vulnerable' or 'vulnerable', or live with such people been fully considered? **Such staff will have a proxy carry out their experiment for them.** Can meetings be held online, eliminating the need for people to be on campus or for them to congregate? **Yes, meetings are being held online. The computers in the lab can be accessed remotely by users to allow data to be viewed as it is acquired by a proxy.**
Reduce	Where 'elimination' cannot be applied consider whether you can 'reduce' the likelihood of persons coming into contact with one another:	How can you reduce the number of people required on campus, whether to carry out tasks or to attend meetings?

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Consideration should be given to rotas or shifts in order to keep the number on campus at any one time to a minimum. Night shifts should be avoided, but early and late shifts, or weekend working might be appropriate. Booking systems for deliveries or collections, and systems for the use of receptions, should be set up in such a way as to minimise person-to-person contact. People must be encouraged to leave the University as soon as they have finished the activity which cannot be conducted from home. Wherever possible, all data should be uploaded to a shared drive or system which allows the analysis or work to be undertaken at home. Writing-up of experiments, results and reports must be conducted at home.	**All meetings will be held online. A maximum of 2 people at a time will run experiments in MAS3.18 at a time, and 1 person at a time in P1.53. During training, a maximum of 3 people will enter MAS3.18, and 2 for P1.53.** How will you stagger working times, so that people do not need to be in the same space at the same time? **Project students in MAS3.18 will obtain data in their fixed pairs, on Mondays and Thursdays. Outside that, only 1 person will be allowed to run experiments in each lab at a time.** How will you reduce the hours that people need to be on site? **Data analysis will be carried out off-site.** How does your booking process control the number of people in your facility/space? **Booking is managed by the PIs via the existing web booking form at** **https://go.warwick.ac.uk/ultrafast/booking.** If the spaces you manage are big enough, can you minimise the frequency and time that people could potentially come into contact with each other? **Multiple occupancy will only occur during training sessions or Final Year Project sessions. The lab spaces**

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		==are large enough to maintain social distancing during these times.== What floor markings can be provided to ensure that people maintain 2m distancing? Contact Estates via the Helpdesk if you wish to mark the floor in your area. **Unnecessary, see above.**
Isolate	Where work activities have to be carried out with others, and persons have to work within relative close proximity to one another for intermittent work activities: Screens (such as Perspex screens) and barriers (to keep people back from reception desks for example) must be deployed where there is regular contact with people which cannot be eliminated. Try to keep staff groups small and consistent as far as possible, forming fixed teams and partnering arrangements for people whilst at work. The number of different contacts people have with others at work should be kept as low as is possible. Consider access for cleaners, IT staff, Estates staff, etc. and how such activities can be carried out safely. Ventilation and fresh air is important – desk top humidifiers must not be used in the workplace. Justify why you cannot conduct a meeting online, AND is there a space where you can meet with a small number of staff that is in the open or	Do you need to introduce screens or barriers to separate people? **No** How will you reduce the team size to be as small as possible, or identify fixed teams/partnering? **A small number of users will perform experiments on behalf of others, who will perform data analysis at home.** How will you ensure people conduct their work away from each other? ==**Most lab use will be by a single user at a time. In the case of multiple occupancy (e.g. Final Year Project students), users will work at separate stations (e.g. one works on the laser system, one runs the experiment from the computer).**==

Hierarchy of Control Measures to be used (these are listed in order of priority, but a combination of controls may be required)		Control Measure (Please answer the questions in this column)
	where there is good ventilation, and where 2 metres distancing can take place? Use Teams/Zoom/Skype, etc. for meetings.	Can you open windows (including in vehicles) or doors to increase ventilation to the space and permit fresh air circulation? [Note: this is not applicable to containment labs or spaces where there is local exhaust ventilation in place as this can affect extraction efficiency] **No windows – these are contained laser labs with AC and fresh air input from the building.** Is there good general ventilation provided by air handling or air conditioning units where windows cannot be opened? **Yes, supplied by A/C.**
Control	Where 'critical activity' work within 2 metres just cannot be avoided: • Introduce a local system where you will know who is on site and what work they are doing and increase the level of supervision to monitor and manage compliance with the working arrangements. • People should work from a desk or work station assigned for their exclusive use, and avoid desk sharing or hot-desking as far as possible: where desks, workstations or equipment have to be shared, these should be cleaned after each use. • Workers should conduct their activities by working side by side, or facing away from each other, rather than face to face wherever possible • Ensure that there is a means to regularly clean common touchpoints, doors, buttons, handles, tools, equipment etc. in spaces where you do not have routine cleaning by Estates Cleaning staff.	Identify any essential tasks that will require people to potentially work within 2 metres of each other. ==During training sessions people may step briefly within 2 metres. Gloves to be worn as common touch points cannot be cleaned (e.g. optics mounts) by wipes or spray.== Can the workplace be rearranged to allow people to work side-by-side or back-to-back, rather than facing each other? How can you rearrange tasks to enable them to be carried out by one person, or by maintaining the 2 metres distancing? **n/a**

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- Ensure that there is hand washing facilities in the spaces (with soap and water) to permit people to wash their hands before and after using any equipment? - Introduce hand sanitiser (for spaces that do not have soap and water) - Keep work to short durations e.g. less than 15 minutes. - Reduce the frequency that the lifts are used to reduce congestion and contact at all times including where the lifts are used for the movement of goods from one floor to another. - Cleaning equipment/supplies for IT equipment (including photo-copiers, etc.) might be required, and/or added to the cleaning regime for the area. - Consider access for cleaners, IT staff, Estates staff, etc. and how such activities can be carried out safely.	How will you ensure the areas are being cleaned regularly and at the end of the day/shift? **Users will wipe down their tools and work areas with alcohol at the end of their allotted measurement time. Tools will not be shared with other labs. Spray bottles of surface sanitiser are available within the department and will be provided for each space.** Are there enough hand washing facilities for those involved in the 'critical activities'? **Hand washing facilities exist (sink) in the MAS3.18. Soap and disposable towels to be provided.** **P1.53 does not contain a sink suitable for hand washing.** Do you need to introduce hand sanitiser? **In place.** Will you need to use the lift for any activities? **Liquid nitrogen may need to be taken up in the MAS service lift. No users will, in the first instance, require the lifts.** Will cleaners, IT Staff or Estates need to access your area whilst your staff are working? **No need for any other staff to access.**

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First Aid and Fire Safety	Have you considered any high risk activities which need particular First Aid or Fire Safety arrangements. If you are concerned about first aid cover or fire safety contact Health and the Safety Helpdesk. Security will be able to provide emergency First Aid support during this period, but managers should endeavour to provide first aiders as far as is possible at present. Encourage all members of staff to act as temporary Fire Wardens during this period. They can complete the Fire Warden training module available on Moodle. They need to know how to flag any concerns relating to fire safety to the Health and Safety Helpdesk. Normal fire escape routes take precedence over one way routes in an emergency situation.	Are there any high risk activities which need particular First Aid or Fire Safety arrangements. **Occasional cryogen use, covered by the existing RA.** Do staff know how to access first aid kits or how to contact Security for emergency first aid. **Yes – this information is also provided to staff in our additional SOP (attached).** Do staff know how to access other risk assessments relevant to their area or activity. **All staff are shown where these are in each lab space and have read and signed that they understood as part of their usual induction.**
Behaviours	The measures necessary to minimise the risk of spread of infection rely on everyone taking responsibility for their own actions and behaviours. As a manager you will need to encourage an open and collaborative approach, where any issues can be openly discussed and addressed. Line managers must hold a 'returning to work briefing' with any staff returning to campus at the earliest opportunity, sharing this completed document with them in writing and allowing any questions. Line managers must carry out regular team meetings to review this risk assessment and arrangements with staff. Line Managers should also refer to and follow any relevant HR or OD guidance.	How will you monitor compliance with the control measures set out in this risk assessment? **Compliance will be monitored by conversation with the PI of each lab.** How often will you brief and update your team on any changes to this risk assessment or associated control measures? **All health and safety measures will be reviewed with the team every two weeks.** How will you encourage staff to flag any concerns they might have, problems or deviations from the

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		arrangements? **Staff will be encouraged to discuss any concerns at regular (weekly) group meetings, or in one-on-one discussions.**
One way Routes and Passing Places	Line Managers must find out any local temporary instructions on any access/egress arrangements, one way routes and passing places. These must be shared with your staff. Normal fire escape routes take precedence over one way routes in an emergency situation.	Are your aware of all of the local temporary instructions on any access/egress arrangements, one way routes and passing places. And can you easily relay these to your staff? **Yes, staff are aware and information can be easily relayed by email and MS Teams. Building requirements are being developed and will be circulated to staff once they are finalised. All staff will have to signify acceptance of those requirements before their card access is reinstated.**
Communal areas	It is important that people continue to take breaks from their work activity. Communal areas which are used for breaks and meals must be arranged to ensure that people maintain 2 metre separation at all times. If people need to remain on campus, they should be encouraged to take their breaks outside in the fresh air, while maintaining 2 metre separation. People should bring their own food, which ideally does not require the use of a microwave, as there will potentially be limited access to kitchen or catering facilities.	**See the Building Operating Procedures for MAS and Physics and the risk assessment for Communal Areas. See above comment.**

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	Kitchenettes, etc. must have floor markings to ensure that they do not become overcrowded and allow queuing, back-to-back working and one-way systems. Toilets, changing rooms, showers, etc. must be managed to ensure that they do not become crowded. ALL personal items MUST be removed from showers and changing rooms unless they are placed in a plastic bag in a locker.	
PPE and Face Coverings	Where Personal Protective Equipment (PPE) has previously been deemed necessary as a control measure to ensure the safety of the individual for the activity that they are undertaking, e.g. work involving hazardous substances, it must continue to be worn. If there is a conflict between the need for such PPE and the wearing of face coverings then the priority must be given to wearing PPE. If the wearing of face coverings introduces an unacceptable level of risk for the activity then face coverings need not be worn, as long as this is captured in this Risk Assessment and other control measures are in place. It is University Policy that face coverings must be worn indoors and in crowded outdoor spaces on campus, unless an individual has an exemption or an activity risk assessment shows that wearing face coverings creates an unacceptable level of risk. Face coverings should NOT be a substitute for 2 metre distancing and more effective hygiene measures (regular handwashing, use of sanitisers, and catching coughs and sneezes in a tissue).	PPE is Personal Protective Equipment, as required under pre-Covid HSE regulations. Refer to your activity-based risk assessment for any PPE requirements. **RAs are in known locations in the labs. All users are trained on the appropriate use of PPE. Gloves to be worn at all times during training.** Face coverings are not PPE, as they potentially prevent the wearer from spreading viruses to others, rather than protecting the wearer. The University face covering policy must be implemented. What instruction will you provide to enable staff and student to follow this policy and how to use face coverings to best effect? Face coverings are required when there is more than one person in the area to meet current university policy, unless the person has a medical exemption. People should follow WHO and UK Government instructions: wash hands before and after putting it on

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		==and removing it, treat as contaminated, wash with laundry. Do not leave it or dispose of it in the lab.== ==Persons with a medical exemption may choose to wear a "sunflower" lanyard or other distinguishing item, but this is not obligatory.==
Guidance to staff	Have you issued the Covid-19 guidance to **all** of those that are returning to work to carry out 'critical activities' (see appendix A)?	**Yes**
	Have you arranged briefing sessions on the risk assessment and SOP with staff?	**Yes**
	Have you arranged 121 meetings with staff who are vulnerable, living with vulnerable people, pregnant, in the BAME community, are disabled or who might have child care (or other care provision) challenges at this point in time?	**Yes**

| Tick here if the level of risk is acceptable to permit the work activity to take place (once you have put the control measures above in place)	☑	**Line Manager Signature**	J. Lloyd-Hughes Rebecca Milot

List of people that this assessment has been shared with:

James Lloyd-Hughes (JL), Rebecca Milot (RM), Jake Hutchinson (JH), Folosho Balogun (FB), Maria Burdanova (MB), Eric Hu (EH), Edward Butler-Caddle (EB), Justas Deveikis (JD), Junn Keat (JK)

Review date: this assessment needs to be reviewed and updated should anything change, should people raise any concerns, or at least once every week

Approved By (HOD or Director)	David Leadley	**Signature**		
Date	17/06/2020	**Position**	HOD	
Review Date				
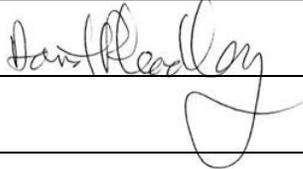
Please print a copy, sign it and share with those involved in the 'critical activity' which is requiring them to come into the University to work.

Send an electronic copy to your Health and Safety Officer or Health and Safety Adviser.

Complete and position the Covid 19 Secure Poster in your respective workspace(s).

Additional Standard Operating Procedures (SOP) for MAS 3.18 and Physics 1.53 workplace procedures during Covid-19 epidemic

This document does not, unless stated otherwise, supersede the current risk assessments and must be considered to be in operation in conjunction with those documents at all times.

This document has been read, understood, and agreed to by the users of these labs. It will be reviewed every fortnight to ensure that all users affected continue to agree with its implementation, and to update the document as the ongoing situation develops. Any alterations must be agreed by all users before going ahead.

Document prepared by James Lloyd-Hughes & Rebecca Milot on 15/06/2020 based on WCUS. Modified 13/10/2020. Standard Operating Procedures developed by Michael Staniforth.

Timing, personnel, and moving through the building

All work to take place in the building while restricted staff measures are in place should be treated as lone, out-of-hours, working, and as such all users should sign in and out of the building as they would on the weekend. Users should bring their own pen to do this to prevent contamination from shared tools.

Only one researcher will be permitted to work in a lab at a time.

Each researcher will be allotted **daily working hours** **which they must adhere to.**

In cases where a disability or other factor might reduce the **daily working hours** of a researcher, that researcher will have an extended **allotted experiment time**.

Due to the requirement for minimum staff in the building, only experiments for which the user is fully trained and capable of running alone should be carried out. This must be agreed by the PIs and the user. If, for any reason, a user is not confident running their experiment, a suitable replacement should be found to carry-out their experiment.

Entering the lab

Upon entering the lab users should either wash their hands (in MAS3.18, using the sink, soap and disposable towels provided) or use the handwash (in P1.53).

Working in the lab

Tools must be wiped down and placed in their correct location at the end of each user's **allotted experiment time**.

Gloves should be worn **at all times** while working in the laboratory. The use of face masks is left to the discretion of each user as per current university guidelines.

Users should use a single pair of each type of laser goggles necessary, and wipe these down before and after their **allotted experiment time.**

In the event of there being a shortage of PPE for any reason, users should retain a single pair of gloves for each entry to the lab, and wear these throughout their work in the lab.

Exiting the lab

Solid waste bins will be placed outside the laboratory corridor door so that gloves can be removed at the last possible moment. **All waste bins/bottles must be sanitised before being taken out of the lab for disposal.**

After their allotted experiment time is over, the user should wipe goggles down again and place them at the back of the pile, each new user taking goggles from the front.

Planning Experiment Time

Priority will be given to final year PhD students, or users who have other hard deadlines approaching for which data is required.

Priority will also be given to those users who require multiple days of laboratory time to collect the data which they require. Those users who require only a single day for a certain experimental run, or less, will be given the opportunity for a proxy to take data on their behalf. If a user with a whole week allocated finish their experiments in shorter time, they will be able to look down the list of requests for single run/day experiments and perform those experiments (for which they are trained and equipped) as a proxy for the user who made the request. This will substantially reduce the number of people who need physical access to the facility.

Pre-existing Control Measures

The risk of air born droplets is minimised by the air circulation provided by the A/C and the building's air supply.

General Covid-19 Advice

All building/department/university wide risk assessments must be obeyed in full.

It is recommended that, after an allotted experiment time, researchers self-isolate as best they can for one week and monitor for symptoms of Covid-19.

If a researcher shows any symptoms of Covid-19, they must inform Rebecca Milot and James Lloyd-Hughes, and **the researcher will not be permitted into the lab**. If they develop symptoms during or recently to their allotted experiment time, the lab must be shutdown for 72 hours, after which all surfaces should be cleaned thoroughly before work recommences.

In the event of an Emergency

In the event of an accident, users should contact security on 22222 on an internal phone or 02476522222 on a mobile (preferred).

First aid kits can be located in the lab corridors in MAS on floors 1, 2, 3, and 4 and in Physics.

Without the control measures detailed above, the overall risk due to disease is:
Medium

With the control measures detailed above, the overall risk due to disease is:
Low