

















Process/Equipment: Kickstart Physics and High School workshops **Location :** Second Year Laboratory

Procedure Developed by : Tom Gordon **Approved by :** Tom Gordon **Date :** 29-01-2016

Personal Protective Equipment Required (Check the box for required PPE):

															
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Apparatus	Activity <i>(Steps in the process/task)</i>	Hazards Identified <i>(What could cause an injury)</i>	Risk Score <i>(How harmful is it)</i>	Controls <i>(What can be done to minimise the risk of injury)</i>
Jumping rings	Push the button on the capacitor to make the rings leap into the air.	Projectiles in a confined space could cause eye or face injuries.	2	Ensure observers head is not directly above apparatus.
Jacobs ladder and Induction coil	Turn on switch to start the equipment.	Minor static electric shock	2	Only to be operated by a trained demonstrator. Operator to have hair and clothing secured or tied up before operating equipment. RCD (residual current devices), surge protectors and circuit breakers are all used on electrical equipment.
Light and Laser demo	Shine a laser through Perspex	Chance of eye damage.	1	Label hazardous beam exit. Supervision of demo by trained demonstrator.
Liquid nitrogen	Decanting liquid nitrogen from flask bowls. Decant Liquid nitrogen from flask to Superconductors	Possibility of cryogenic burns on exposed skin	6	Only trained operators to use liquid nitrogen. PPE is to be worn (gloves, goggles, covered shoes) and only tongs are used to manipulate objects which have been placed in the liquid.
Electroscope	Hit latex glove on Perspex sheet	Injury to hand	1	Supervision by at trained demonstrator
Chairs and equipment	Sitting on Chairs and other equipment	Personal injury from improper handling	1	Participants to take care when sitting or using equipment, not to touch other equipment