

# UCLouvain Status report

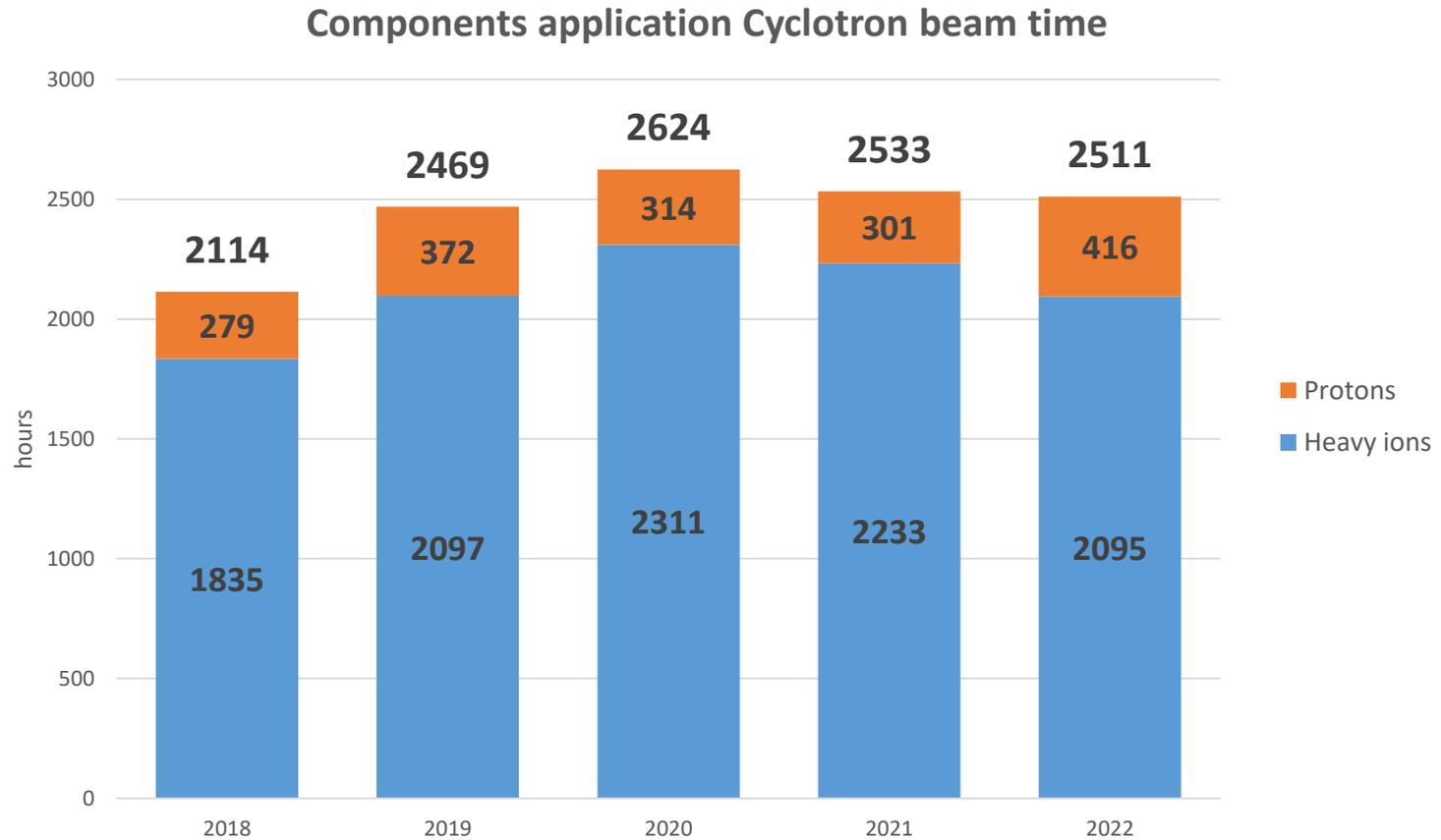
Nancy Postiau

**ESA contract 4000124659/18/NL/KML/zk**

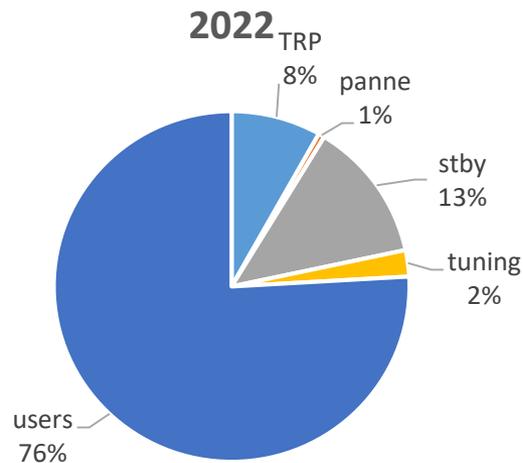
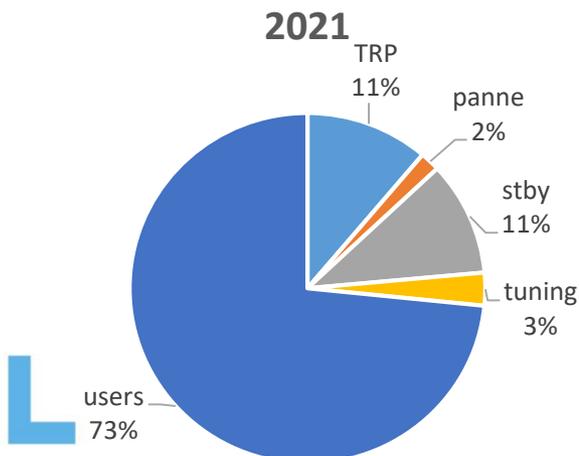
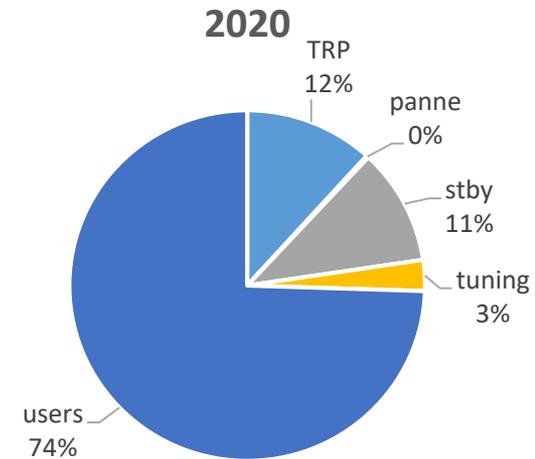
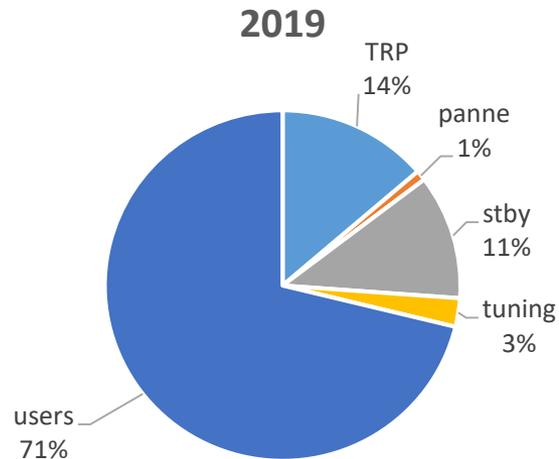
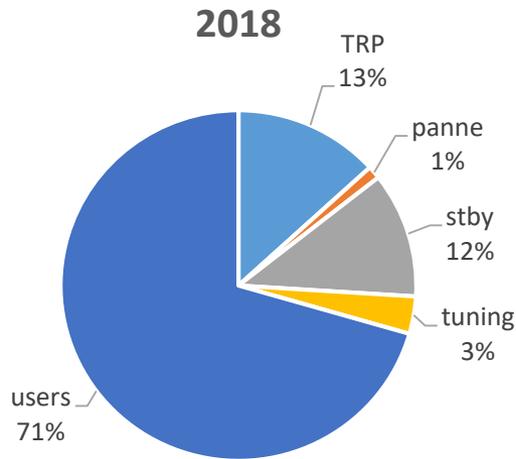
**Utilisation of a Heavy and Light Ion Facility at UCL for Component Radiation Studies**



- Beam time availability



- Beam time distribution



- Development
  - Heavy ion cocktail change

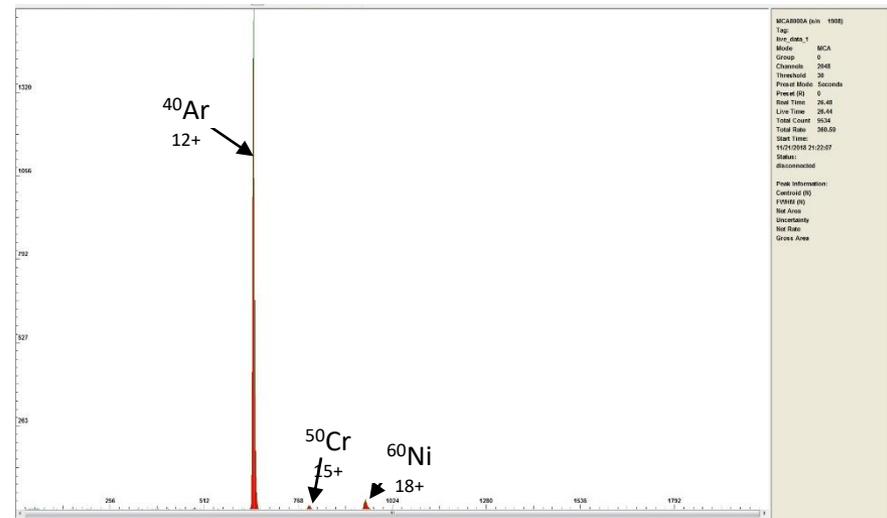
Ion	Energy on device [MeV]	Range on device [ $\mu\text{m}$ ]	LET on device [MeV/(mg/cm <sup>2</sup> )]
<sup>7</sup> Li <sup>2+</sup>	62	448,0	0,35
<sup>13</sup> C <sup>4+</sup>	131	269,3	1,3
<sup>22</sup> Ne <sup>7+</sup>	238	202	3,3
<sup>27</sup> Al <sup>8+</sup>	250	131,2	5,7
<sup>36</sup> Ar <sup>11+</sup>	353	114,0	9,9
<sup>53</sup> Cr <sup>16+</sup>	505	105,5	16,1
<sup>58</sup> Ni <sup>18+</sup>	582	100,5	20,4
<sup>84</sup> Kr <sup>25+</sup>	769	94,2	32,4
<sup>103</sup> Rh <sup>31+</sup>	957	87,3	46,1
<sup>124</sup> Xe <sup>35+</sup>	995	73,1	62,5

- Development
  - Heavy ion cocktail change

## New Lithium beam

- User's need for low LET
- Available only on special request

## New Argon Beam to avoid contamination



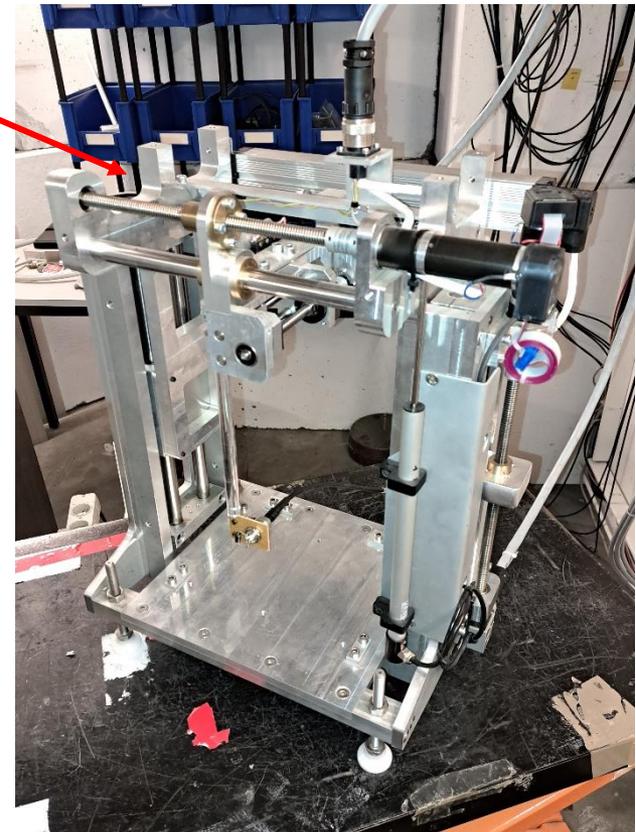
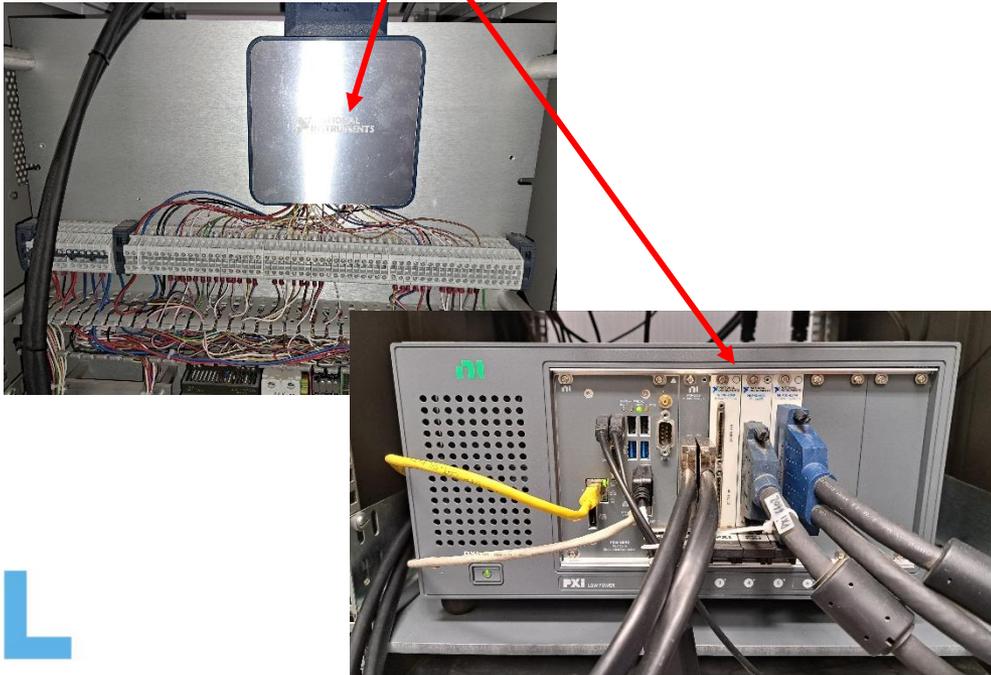
- Development
  - Heavy ion facility

- Improvement of pumping speed
- New flanges and feedtroughs
- Chilled water cooling

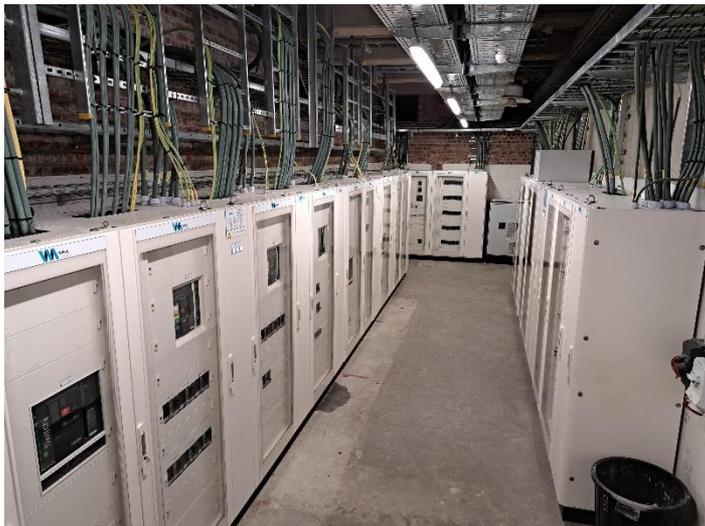
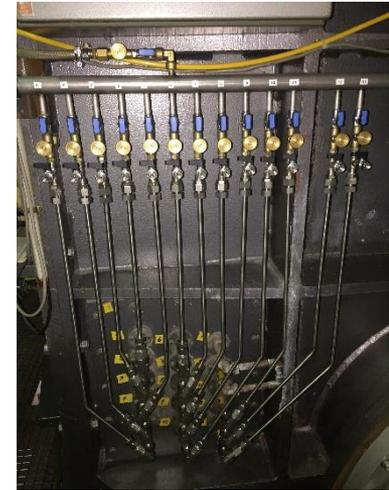


- Development
  - Light ion facility

- New beam scanning system (X-Y-Z)
- Complete renovation of beam line control system



- Continuous work
  - Software and hardware control system upgrade
  - Operator training
  - Dosimetry and beam quality check
  - Cyclotron renovation for better reliability



- Under development
  - Remote control of the beam intensity from the proton facility
  - New Heavy ion test chamber



**Thank you and see you soon**

Information : <https://uclouvain.be/crc>

Contact : [beam-booking@listes.uclouvain.be](mailto:beam-booking@listes.uclouvain.be)