On the TESLA Accelerator Installation

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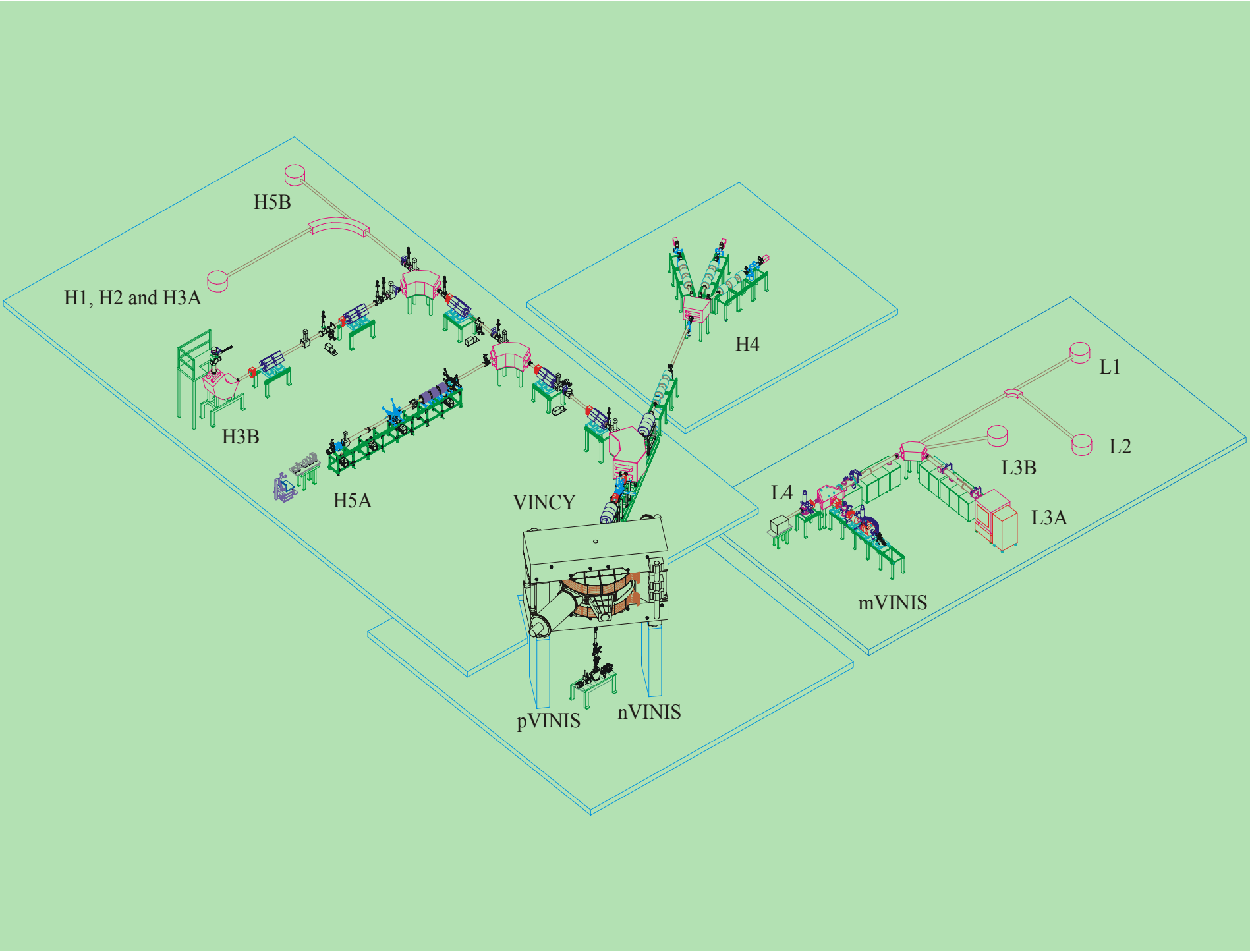

H5B
H1, H2 and H3A
H3B
H5A
H4
VINCY
pVINIS
nVINIS
L1
L2
L3B
L3A
L4
mVINIS

Programs of use of the TESLA Accelerator Installation:

- Basic and applied research in physics, chemistry and biology
- Development of materials and nuclear technologies
- Production of radionuclides and radiopharmaceuticals
- Proton therapy

The phases of continuation of construction of the TESLA Accelerator Installation:

- The first phase (the fast track phase) includes the completion of construction of the VINCY Cyclotron, and establishing of the routine production of radionuclide ^{18}F and radiopharmaceutical ^{18}FDG.
- The second phase comprises construction of the nVINIS Ion Source, and of the channels for radiation research (H3B) and for production of radionuclides (H4).
- The third phase includes construction of the channel for proton therapy (H5A).

The pVINIS Ion Source can deliver the following:

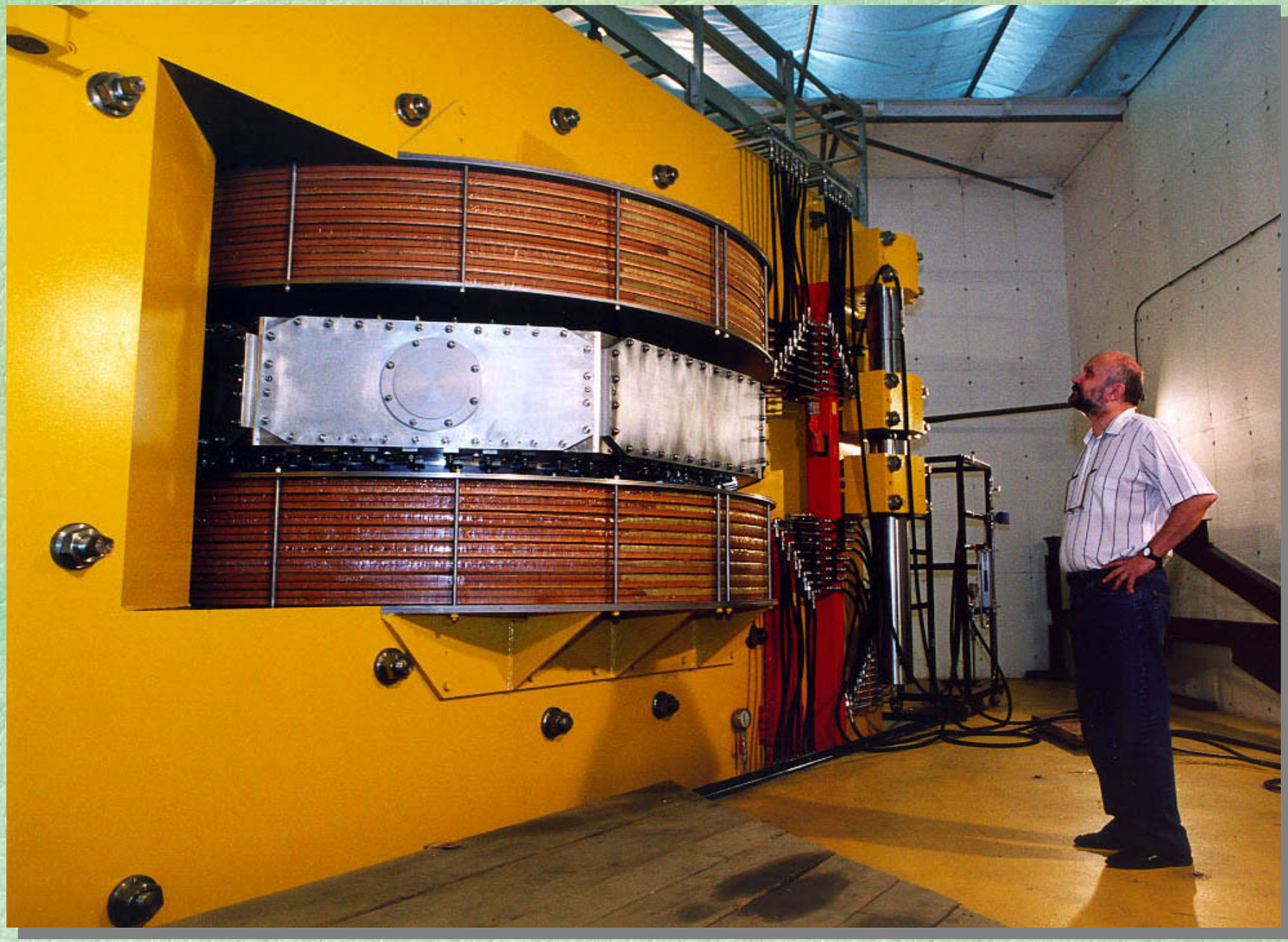
- the beam of H^- ions of the current of 1.2 mA;
- the beam of H_2^+ ions of the current of 500 μA;
- the beam of H_3^+ ions of the current of 900 μA.

The machine can also produce the beams of D^-, D_2^+, D_3^+ and $^4He^+$ ions.


WARNING

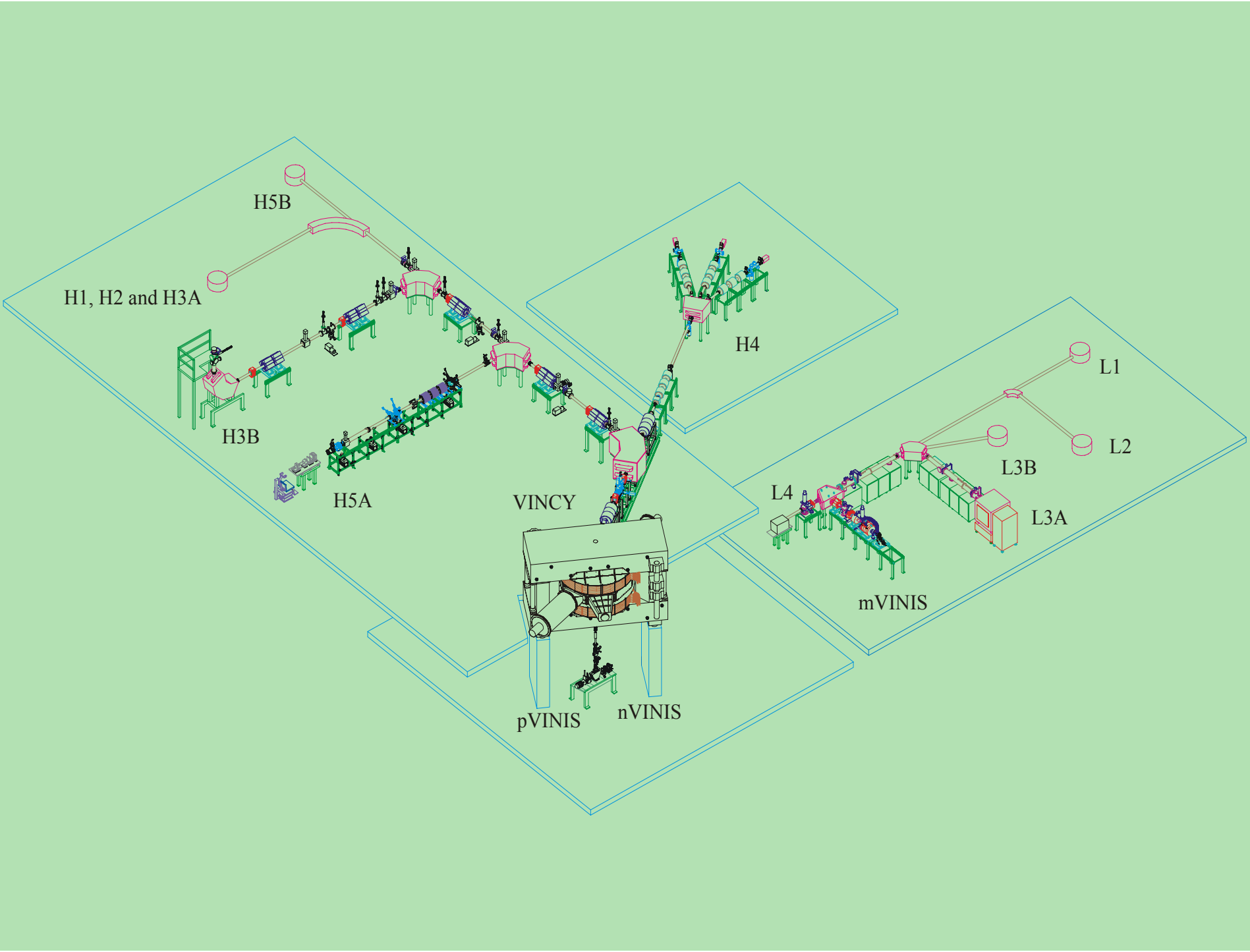
So far, the mVINIS Ion Source has delivered, e.g., the following:

- the beam of $^{16}O^{6+}$ ions of the energy of 90 keV and current of 432 μA;
- the beam of $^{40}Ar^{11+}$ ions of the energy of 165 keV and current of 130 μA;
- the beam of $^{66}Zn^{9+}$ ions of the energy of 135 keV and current of 46 μA;
- the beam of $^{136}Xe^{20+}$ ions of the energy of 300 keV and current of 41 μA;
- the beam of $^{207}Pb^{16+}$ ions of the energy of 240 keV and current of 31 μA.



The test ion beams of the VINCY Cyclotron are the following:

- the beams of H^+ ions of the energies of 15, 30 and 65 MeV;
- the beam of $^4He^{2+}$ ions of the energy of 7 MeV per nucleon;
- the beam of $^{40}Ar^{15+}$ ions of the energy of 3 MeV per nucleon.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