### Program

**9-10 juin - campus Pierre Laffitte**

#### 9 juin

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.00-14.45</td>
<td>Plenary talk: Frederic Precioso</td>
<td>Why transformers are expected to be the next super neural model?</td>
</tr>
<tr>
<td>14.45-15.00</td>
<td>Melissa ALZATE BANGUERO (ESPCI-LPEM)</td>
<td>Towards neuromorphic computing on quantum many-body architectures</td>
</tr>
<tr>
<td>15.00-15.15</td>
<td>Biswajit BISWAS (APC-Paris 7)</td>
<td>Developing a combined cosmic shear analysis with Bayesian neural networks</td>
</tr>
<tr>
<td>15.15-15.30</td>
<td>Francesco CALVANESE (CBI-LCQB)</td>
<td>Machine Learning for the Origin of Life in the RNA world</td>
</tr>
<tr>
<td>15.30-16.00</td>
<td></td>
<td><strong>COFFEE BREAK</strong></td>
</tr>
<tr>
<td>16.00-16.15</td>
<td>Daniele CAVALLI (LIP6-ENS)</td>
<td>The politics of coding</td>
</tr>
<tr>
<td>16.15-16.30</td>
<td>Linnea EVANSON (LSP - ENS)</td>
<td>Language Acquisition in Brains and Algorithms</td>
</tr>
<tr>
<td>16.30-16.45</td>
<td>Letizia LAMPERTI (CEFE-ETH)</td>
<td>Machine learning for biodiversity monitoring</td>
</tr>
<tr>
<td>17.00</td>
<td></td>
<td><strong>COCKTAIL</strong></td>
</tr>
</tbody>
</table>
09.00 - 10.00  Plenary talk: Laure BLANC-FERAUD
Sparse optimization and GAN for super-resolution in fluorescence microscopy

10.00 - 10.15  Pablo JEKEN RICO (Mines Paris - CEMEF)
Physically Informed Machine Learning for controlling unruptured intracranial aneurysms

10.15 - 10.30  Pierre ORHAN (LSP-ENS)
Learning dynamics in biological and artificial neural networks

10.30 - 11.00  COFFEE BREAK

11.15 - 11.30  Konstantinos PARGINOS (Mines Paris - PERSEE)
Advanced methods for enhancing interpretability of AI tools with application to the energy sector

11.30 - 11.45  Alessandro PASQUI (Mines Paris - CAOR, CIRB)
AI-assisted reconstruction of 3D human embryo morphology from 2D medical images

11.45 - 12.00  Chiara SEMENZIN (IBENS)
A computational and artificial Intelligence approach for studying dolphin communication

12.00 - 14.00  LUNCH & MUSIC CONCERT

14.00 - 15.00  Plenary talk: Benjamin NEGREVERGNE
Training neural networks that are robust against adversarial examples

15.00 - 15.15  Mats VAN TONGEREN (CIRB-Gulliver ESCPI)
Data-driven Enzyme Evolution

15.15 - 15.30  Stefano VRIZZI (LNC2-ENS)
Impact of human cognitive traits on financial market formation

15.30 - 15.45  Amir Hossein ZERAATI-ALIABADI (IBENS-LBMC-LPENSL)
Artificial Intelligence to Decode the Genomic Replication Programme of Human Cells

15.45 - 16.00  END OF THE WORKSHOP