

MATH-251(a) - Numerical analysis

Exam instructions

Date of the exam: Wednesday 14 January 2026, 09:15–12:15

Location of the exam: CO 020, CO 021, and CO 023

Exam rules This exam is composed of six questions. Answer the six questions on six sheets of paper: one sheet per question. Write your Sciper number on each of the six sheets. Only these six sheets will be collected and evaluated. Thus, all your answers (including Python code when requested) must be written on these sheets; the Python/Jupyter code cannot be submitted electronically. The only authorized package to write your Python code is `numpy`. Write everything with a blue or black pen. Scratch paper is provided for your personal notes, but it will not be collected and considered for the evaluation. You can answer a subquestion even if you did not answer all preceding subquestions. The concision and the quality of the writing, the clarity of the explanations, and the rigor in the reasonings will be taken into account in the evaluation.

Authorized material The only authorized material is a personal handwritten A4 sheet, front and back; the sheet cannot be a copy of the sheet of another student. No additional sheets, notes, or books (paper or electronics), or calculator, mobile phone, tablet, laptop, or other electronic devices are admitted. The computer can only be used to access the Jupyter Notebook. The access to the Internet (e-mail, websites) is prohibited.

Virtual machine login instructions Before the start of the exam: (1) sign in with your GASPAR username and password (same as for IS-Academia and Moodle); (2) choose the MATH-251(a) virtual machine client. After the exam has started: (3) open the Jupyter Notebook application by double clicking the icon on the Desktop; (4) in the Jupyter Notebook file browser, go to Desktop and then click on `exam2026.ipynb`. We provide you with a copy of the exam notebook called `exam2026_copy.ipynb`. If you make some unwanted modifications and do not know how to revert them, you can compare with the copy.