

# ***Exam Instructions***

## *Exam Format*

- The exam is multiple choice for ~80% of its content.
- The other 20% entail questions that will be graded manually.
- The exam is closed-book.
- It lasts 3 hours.

# Exam Practicalities

- **ALLOWED MATERIAL:**
  - Pen/pencil/eraser
  - Basic calculator (no advanced functions)
  - One A4 recto-verso page with personal handwritten notes (typed notes are not allowed). Handwritten notes on tablet are allowed.
  
- **NOT ALLOWED MATERIAL:**
  - Handbags
  - Coats
  - Cell phone, smart watches and any other similar devices

They must be left in a corner of the room
  
- **REQUIRED:**
  - **Camipro card to check your identity and your sciper number, required to validate your exam.**

## *Multiple Choices Questions*

- The exam's multiple choices are composed of two types of questions :
  - Quizzes pertaining to general concepts: same style as what you have in the Moodle quizzes and some of the Interactive Lectures' quizzes
  - Example:

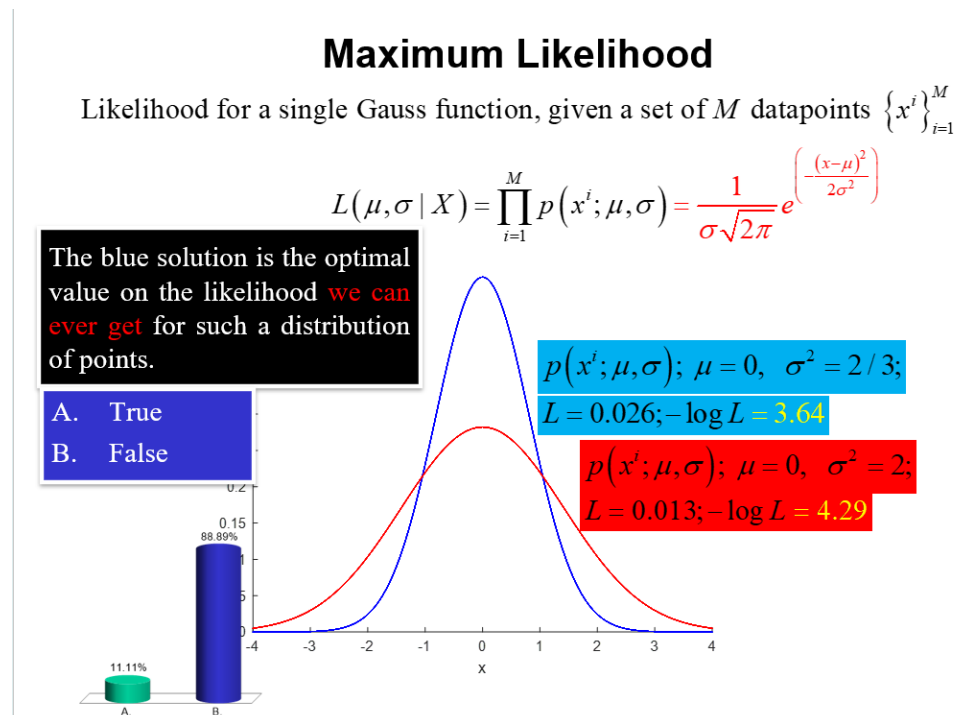
PCA determines the best projections according to:

Select one:

- 1. minimization of reconstruction error
- 2. minimization of the projection error
- 3. maximization of the signal/noise ratio

# Multiple Choices Questions

- The exam's multiple choices are composed of two types of questions :
  - Quizzes pertaining to interpretation of algorithms' results - same style as those done in the Interactive Lectures
  - Example:



## *Open Questions*

- The exam's open questions require you to either draw the solution or resolve a problem.
- These are variants on the exercises accompanying the lectures.
- Example:
  - *Compute the number of parameters required when using a mixture of 10 Gaussians for a GMM clustering fit?*
  - *Compute the computational cost per iteration of the update step for GMM when trained on 1587 3-dimensional datapoints?*

## ***Best Way to Prepare the Exam***

- Review classes' slides
- Redo all quizzes (moodle quizzes and quizzes done in the interactive lectures)
- Redo all exercises
- If necessary, use lecture notes and supplementary material posted on moodle to ensure full understanding of class' material
- If necessary, come to Q&A session to ask last minute questions – session is given on zoom and on site (queries sent by email will be ignored).

