



# Summer school on Probabilistic Morphable Models

Basel, 03. June – 07. June

## Probabilistic shape modelling

Marcel Lüthi

Graphics and Vision Research Group  
Department of Mathematics and Computer Science  
University of Basel

# Probabilistic Morphable Models

Online Course / Futurelearn



Summer school



Shape Modelling

Model fitting

Scalismo

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# Goal

*All participants feel confident to approach complicated real-world problems.*

At the end of this week you should have:

- a good understanding of the conceptual approach
  - knowing how to approach a problem
  - knowing its strength and limitation
- implemented the concepts in at least 2 practical use cases
- good mastery of the tools (Scala / Scalismo)

# Programme

	Morning (09:00 – 12:00)	Afternoon (13:30 – 17:00)
Monday	<ul style="list-style-type: none"><li>• Analysis by Synthesis</li><li>• Non-rigid registration</li><li>• Introducing the course project</li></ul>	<ul style="list-style-type: none"><li>• Scala – Part 1</li><li>• Course project</li><li>• Spotlight presentations</li></ul>
Tuesday	<ul style="list-style-type: none"><li>• Bayesian inference</li><li>• Probabilistic model fitting</li></ul>	<ul style="list-style-type: none"><li>• Scala – Part 2</li><li>• Course project</li></ul>
Wednesday	<ul style="list-style-type: none"><li>• Analysis of 2D face images using</li><li>• Course project</li></ul>	<ul style="list-style-type: none"><li>• Course project</li></ul>
Thursday	<ul style="list-style-type: none"><li>• Understanding MCMC</li></ul>	<ul style="list-style-type: none"><li>• Face image analysis – a look back</li><li>• Course project</li></ul>
Friday	<ul style="list-style-type: none"><li>• Selected Advanced topics</li></ul>	<ul style="list-style-type: none"><li>• Social event</li></ul>

# Today's Schedule

Time	Topic
09:15	Theory: Analysis by Synthesis
09:45	Theory: Case study – non-rigid registration
11:00	Introducing the course project
11:30	Setting up the environment – Course project, Part 1
13:30	Theory: Scala – Part 1
14:30	Course project, Part 1
15:30	Spotlight presentations
17:00	Welcome reception