
Project report

Improving Explorability in Variational Inference with Annealed Variational Objectives.

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<https://github.com/alexey-pronkin/annealed>

Abstract

Fitting multiple figures into very tight manuscripts while keeping it pleasant to read is challenging. Therefore figures are often simply attached to the very end of a manuscript file. While easier for the authors, this practice is inconvenient for readers. This L^AT_EXtemplate shows how to generate a compiled PDF with figures embedded into the text. It provides several examples of how to embed figures or tables directly into the text thus giving you a range of options from which you should choose the one best suited for your manuscript. Check out Schlegel et al., (2016) as example of use [?].

Introduction

In the introduction you will see an example of text wrapping around the figure with a figure caption on the margin (Fig. ??). This is done by combining the `wrapfigure` with

the `marginnote` environment. Please note that in this case the figure (`wrapfigure`) and the figure caption (`marginpar`) have to be separated as you can tell from the code. The `wrapfigure` environment can be a bit tricky when it comes to text formatting. Thus some general hints: (a) try to avoid line breaks in the code as this may result in weird formatting around the figure, (b) the figure should not span multiple headlines (sections) and (c) if you encounter problems with the line break right after the `wrapfigure` try using `\mbox{}` to prevent premature line breaks (see example in code). As stated in the figure caption, setting up figures

Figure ??. Example of a margin caption. Setting up your figure + caption like this looks fancy and does not disrupt the flow of the text. But it requires more manual adjustments (position, spacing, labeling) compared to using standard L^AT_EXfigure environments.




fig1.pdf

this way requires a bit more manual adjustments but it makes figures blend in nicely without interrupting flow of text.

Materials and Methods

Tables.

In this section you will find an example of a table using the `table` plus the `adjustwidth` environment and should give you a minimal example for tables in L^AT_EX (Table ??).

Table 1. Example Table. This table demonstrates how to use the `adjustwidth` environment if you need that tad bit of extra width for your figures or tables.

Heading 1				Heading 2		
cell 1 - row 1	cell 2 - row 1	cell 3 - row 1	cell 4 - row 1	cell 5 - row 1	cell 6 - row 1	cell 7 - row 1
cell 1 - row 2	cell 2 - row 2	cell 3 - row 2	cell 4 - row 2	cell 5 - row 2	cell 6 - row 2	cell 7 - row 2
cell 1 - row 3	cell 2 - row 3	cell 3 - row 3	cell 4 - row 3	cell 5 - row 3	cell 6 - row 3	cell 7 - row 3

Paragraph. Instead of adding more and more subsections you can use the `\paragraph{}` command to give structure to your manuscript.

Formulas.

For mathematical formulas you should use the `math` environment. See this example:

$$f(A_{ik}, A_{jk}) = \min(A_{ik}, A_{jk}) - C_1 \max(A_{ik}, A_{jk}) e^{-C_2 \min(A_{ik}, A_{jk})}$$

Results

Standard floating figures.

Figure ?? is wrapped into a standard floating environment. That means that \LaTeX will determine the exact placement of the figure. Even though you can state preferences (see code) it can be tricky to get the right placement - especially when working on very tight manuscripts. If you want exact placement, add `\usepackage{float}` to this file's header and use `[H]` in the figure environment's placement options.

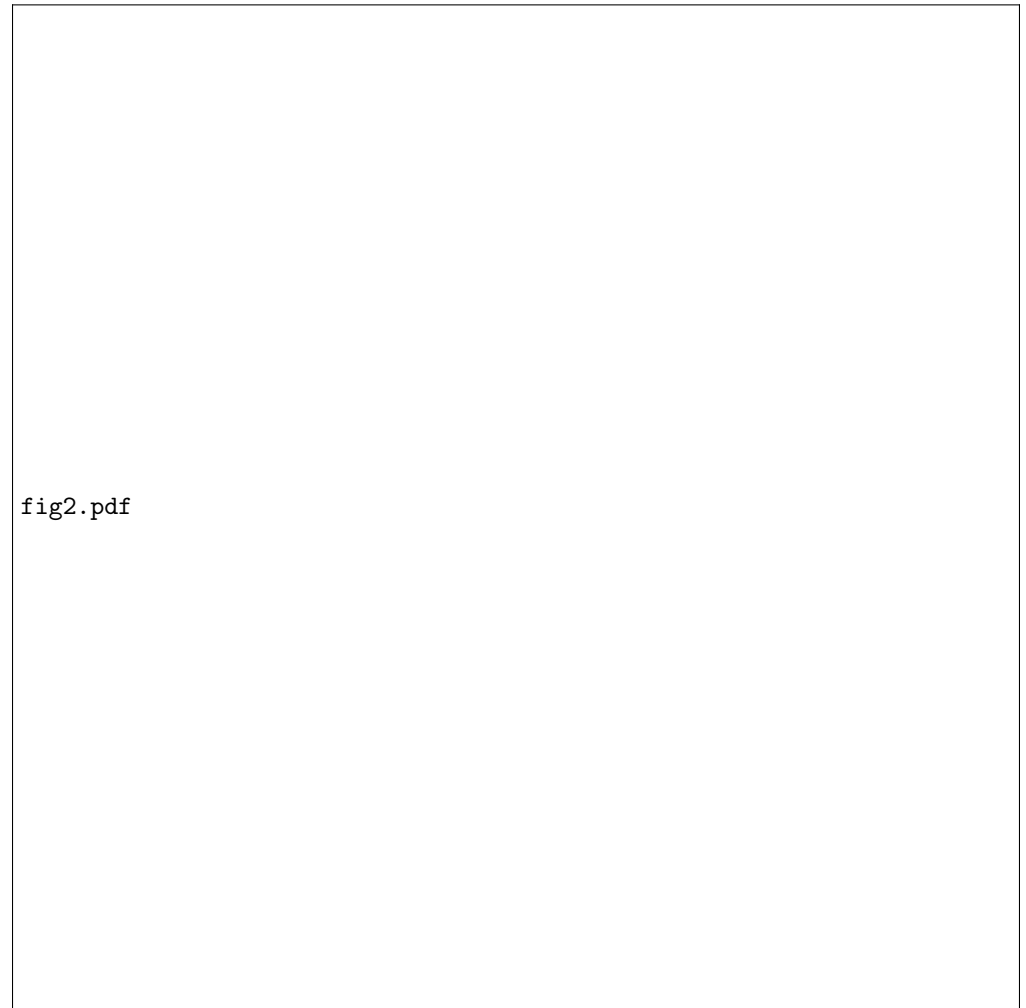


Figure 2. Example of a standard floating figure. A-F, This figure is wrapped into the standard floating environment.

Page break in figures.

The standard floating figures in \LaTeX do not cope well with page breaks which can make it difficult to fit in large figures. One way to deal with this is to separate figure and caption but `\caption{}` might still give troubles at page breaks. Figure 3 demonstrates a way to manually set up figure and caption such that it continues onto the next page.

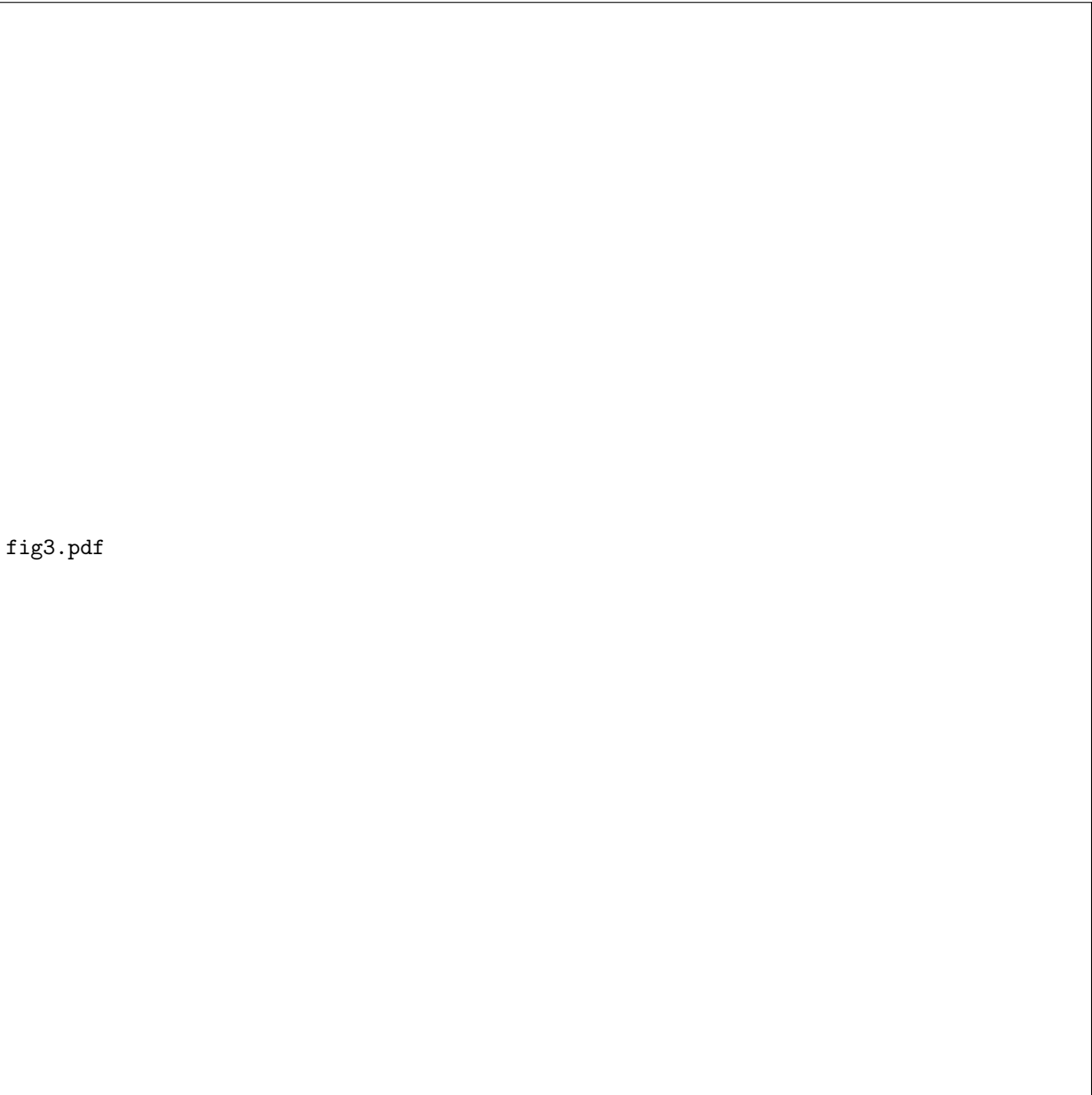


fig3.pdf

Figure 3. Example of a wide figure with multi-page caption. **A**, Proin lectus ex, venenatis vel ornare eget, hendrerit tempus justo. Pellentesque molestie purus sed pretium tincidunt. Curabitur facilisis, orci vitae mollis fringilla, elit erat fermentum justo, nec luctus nunc sapien vel dolor. Cras enim justo, ullamcorper ut commodo at, posuere et ex. Fusce cursus sapien id augue maximus convallis. Praesent egestas massa in enim volutpat varius. In aliquam turpis urna, at elementum turpis eleifend at. **B**, Proin risus erat, tincidunt quis massa non, sollicitudin congue metus. Aliquam quis magna vulputate, posuere est eu, tempor nisi. Cras gravida tempus felis, vitae lacinia lacus volutpat quis. Pellentesque et eros eu mi suscipit tempus. Proin in augue scelerisque. **C**, Donec a tempor tortor, et dignissim enim. Cras in ipsum sed velit bibendum imperdiet. Aenean aliquet mauris maximus, sodales ligula sit amet, placerat felis. In tristique nisi eu risus rutrum, ac lacinia lorem cursus. Nunc eget condimentum purus. Maecenas imperdiet nisl eu accumsan gravida. **D**, Nullam tincidunt, magna sed auctor ultrices, leo mi eleifend velit, quis varius ex diam non tellus. Nam tincidunt vehicula turpis, ut euismod turpis elementum vel.

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Supporting Information70

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If you intend to keep supporting files separately you can do so and just provide figure captions here. Optionally make clicky links to the online file using `\href{url}{description}`.

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