Title of your thesis

Diploma/Semester Thesis in ...

Swiss Banking Institute

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Executive Summary

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1 Introduction

1.1 Subsection 1

Bla...

1.2 Subsection 2

Blupp...

2 This is the long form of a chapter title, which is to long for the headings

3 Examples for citations

As in [FRW], [RW06] and [HR07]...

4 Other examples

4.1 Equations

Without numbers:

$$\begin{aligned} C_1(|A|^2 - 1) \le |\phi(A)| &\le C_2(|A|^2 + 1), \\ |S(A)| &\le C_3 |A|. \end{aligned}$$

With numbers:

$$\begin{aligned} u_t(x,t) - \operatorname{div} S(\nabla u(x,t) &= 0, \\ u(t = 0) &= u_0. \end{aligned} \qquad (1)$$

See (1)...

4.2 Definitions, theorems etc.

Definition 4.1 (Young measure solutions)**.** *We call a pair (u, ν) a* Young measure solution *of system (1) if:*

- $u \in H^1_0(G \times (0,T)) \cap L^\infty((0,T), H^1_0(G))$*, and* $\nu := (\nu_{x,t})$ *is a family of probability measures.*
- $\langle Id, \nu_{x,t} \rangle = \nabla u(x,t)$ *for a.e.* $(x,t) \in G \times (0,T)$*.*
- *For all* $\zeta \in H^1_0(G \times (0,T))$ *we have:*

$$\int_0^T \int_G \langle \phi, \nu \rangle \nabla \zeta + u_t \zeta \, dx \, dt = 0.$$

With this definition in hands we can state the following theorem:

Theorem 4.2 (Young measure solutions for parabolic equations)**.** *Let $G \subset \mathbb{R}^n$ be a bounded domain with smooth boundary, and assume the regularity and growth conditions for ϕ and S stated above. Moreover assume that $u_0 \in H_0^1(G)$, then there exists a Young measure solution (u, ν) to the problem (1).*

You can quote the Theorem 4.2.

4.3 Figures

See Fig.1.

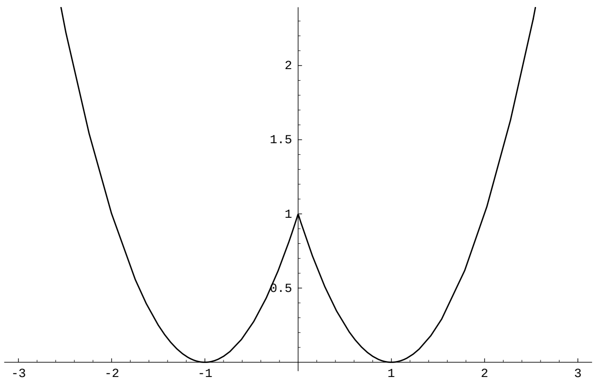

Figure 1: The function $\phi(Y) := \mathrm{dist}(Y, \{A, B\})^2$ with $A = \{-1\}$ and $B = \{+1\}$. – The cusp in $Y = 0$ does not lead to a lack of differentiability for ϕ^{qc}.

4.4 Items

One possibility is:

(i) $\phi^{qc} = \phi^{**}$,

(ii) $\phi^{rc} = \phi^{**}$.

4.5 Arrays and tables

Here an easy example for an array:

$$\begin{array}{rcl} u(1,t) & = & \left\{ \begin{array}{cl} \frac{3-t}{2}\sin(2\pi t), & t \le 2, \\ 0, & t > 2, \end{array} \right. \\ u(0,t) & = & 0. \end{array}$$

And a table:

	Description	dx	h
Experiment A	Two-well potential, initially two peaks	0.02	0.02
Experiment B	Sine on the boundary, stopping	0.02	0.02
Experiment C	Small sine on the boundary, stopping	0.05	0.05

A BibTex

Please look in the references...
The BibTeX-file looks as follows:

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@unpublished{Frei:07a,
Author = {Patrick Frei and Marc Oliver Rieger and Mei Wang},
Note = {Work in progress},
Title = {Barrier products and behavioral finance}}

@book{Hens:07a,
Author = {Thorsten Hens and Marc Oliver Rieger},
Date-Added = {2006-07-02 16:35:32 +0200},
Date-Modified = {2006-07-02 16:44:34 +0200},
Publisher = {Springer Verlag},
Title = {Financial Economics -- A Concise Introduction to Classical and Behavior Finan
Year = {scheduled for 2007}}

@article{Rieger:04d,
Annote = {Marc Oliver Rieger},
Author = {Marc Oliver Rieger and Mei Wang},
Journal = {Economic Theory},
Pages = {665--679},
Title = {Cumulative {P}rospect {T}heory and the {S}t.~{P}etersburg Paradox},
Volume = {28},
Year = {2006}}
```

It is automatically used to build the bibliography out of the references made in the text.

References

[FRW] Patrick Frei, Marc Oliver Rieger, and Mei Wang. Barrier products and behavioral finance. Work in progress.

[HR07] Thorsten Hens and Marc Oliver Rieger. *Financial Economics – A Concise Introduction to Classical and Behavior Finance*. Springer Verlag, scheduled for 2007.

[RW06] Marc Oliver Rieger and Mei Wang. Cumulative Prospect Theory and the St. Petersburg paradox. *Economic Theory*, 28:665–679, 2006.