MY ARTICLE TEMPLATE

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Last Modified on June 18, 2024

Abstract

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum. Just a test.¹

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OUTLINE This is a template for articles that mixes up the classic-thesis template by André Miede (Miede 2024). By no means it is better, it is just the one I find most comfortable with working. Basically, I have added the functionalities that I like and need. Feel free to use it, and let me me know if you actually do.

1 ADDED FUNCTIONALITIES

Other than the many useful settings from the Classic Thesis template, I will outline here what I added.

{thm:first

1.I From the theorem_environments.tex

You have many objects of the Theorem environment type.

Theorem 1.1 (Title). Text

Example 1.2. text

Definition 1.3. *text*

Lemma 1.4. text

Conjecture 1.5. text

^{*}Institution

¹ This is a footnote.

Proposition 1.6. text

Corollary 1.7. text

Assumption 1.8. text

Result 1.9. text

Condition 1.10. text

Question 1.11. text

Answer 1.12. text

Problem 1.13. text

Fact 1.14. *text*

Remark 1.15. text

Observation 1.16. *text*

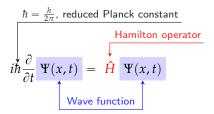
Claim 1.17. text

1.II From the macro.tex

This is a quote

Author name

THANKS to the lettrine package, you can sart sections in a cool way. Be ready to annotate equations:



- You can cross words
- highlight a new term
- set the metadata in hypersetup
- some cool colors green, red, blue, blue-violet
- you can also use them inside brackets like this
- ✓, X are useful
- TODO:a todo generic tool
- **DONE** command
- ullet you can use the indicator $\mathbb 1$
- HOT IDEA: an idea
- 1/2 appears nicely in text
- bold math installed, as well as rsfs for $\mathscr L$
- d is the differential operator

• if you have an equation:

$$E = mc^2 \tag{1.18} \quad \{\{\text{eqn}: \text{equa}\}\}$$

and another

$$a^2 + b^2 = c^2$$
 (1.19) {{eqn:equal}

{thmt@@res {**thmt@@se**s

you can reference them cleverly as eq. (1.18) and ??. Equation (1.18) and ?? can be used at the beginning of a sentence.

This is to be compared in efficiency with mentioning Eq. 1.19 directly.

- equation labels are shown
- (Left), (Center), (Right), (Top), (Bottom), (a), (b), (c), (d) are useful for mentioning parts of an image.
- tikz is loaded
- algorithm, algoseudocode are loaded (see below)
- figref, Figref, twofigref, quadfigref, secref, Secref, twosecref, secrefs, eqref, Eqref, plaineqref, chapref, Chapref, rangechapref, algref, Algref, twoalgref, Twoalgref, partref, twopartref are useful for quick referencing.
- you can do a list of theorems TODO:not adjusted
- you can do a list of acronyms TODO:not adjusted
- you can do a nomenclature list TODO:not adjusted

colored boxes

Law Box

question

text

text

Further References

References

In a nutshell

Text

place a horizontal line

Simone: a comment

Theorem 1.20 (Restatable Theorem). We will repeat this just below.

You can recall theorem 1.20 with the command of its name:

Theorem 1.20 (Restatable Theorem). We will repeat this just below.

You can create algorithms

Algorithm 1 An algorithm with caption **Require:** $n \ge 0$ **Ensure:** $y = x^n$ $y \leftarrow 1$ $X \leftarrow x$ $N \leftarrow n$ while $N \neq 0$ do if N is even then $X \leftarrow X \times X$ $N \leftarrow \frac{N}{2}$ □ This is a comment else if N is odd then $y \leftarrow y \times X$ $N \leftarrow N - 1$ end if end while 1.III From the math_commands.tex The three main objects have shortcut commands: d, e^{arg}, i. (1.21)We have a very nice calligraphic package: aa (1.22)We have a bunch of preset operators: arg max, arg min, sign, card, diam, vol, Corr, sign, dom, epi, ker, (1.23)null, range, Im, int, rint, bdry, cl, rank, conv, diag, Arg (1.24)poly, polylog, avg, val. (1.25)Some shortened symbols: \bot , $E_X[aX]$, $E_X[aX \mid Y]$, \bot , \mathbb{P} , $\mathbb{P}[X > t]$, $\exp\{ax\}$, $d_{\mathsf{TV}}(\mu, \nu)$, a_1, \ldots, a_n , $\min\{1, 2, 3\}$, $\max\{1, 2, 3\}$ (1.26)sansserif, $\langle aX \rangle_{\beta}$, $\mathrm{Var}_{X}\left[aX\right]$, $\mathrm{CoV}_{X}\left[X\right]$, $\mathrm{Tr}\left(\mathbf{\Sigma}\right)$ (1.27) $\mathfrak{L}[\cdot]\rlap/\rlap/\rlap/t, p_{\rm data}, \hat{p}_{\rm data}, \hat{p}_{\rm data}, p_{\rm model}, p_{\rm model}, p_{\rm model}, p_{\rm encoder}, p_{\rm decoder}$ (1.28) $p_{\text{reconstruct}}$, Ber, Laplace, λ , rectifier, d_{KL} , Pa. (1.29)Some norms: $\|\cdot\|, \|\cdot\|_0, \|\cdot\|_1, \|\cdot\|_2, \|\cdot\|_\infty, \|\cdot\|^2, \|\cdot\|.$ (1.30) $\|\cdot\|_{\cdot}^{2}\langle\cdot,\cdot\rangle,\|\cdot\|_{0}$ (1.31)Other shortened symbols: $\lambda, \epsilon, \ell, \widehat{\cdot}, \widetilde{\cdot}, i$. (1.32)Asymptotic notation: $O(\cdot), \Omega(\cdot), o(\cdot), \omega(\cdot), \Theta(\cdot), \widetilde{o}(\cdot), \widetilde{O}(\cdot), \widetilde{\omega}(\cdot), \widetilde{\Omega}(\cdot), \widetilde{\Theta}(\cdot).$ (1.33)Complexity classes: P, NP, BPP, DTIME, ZPTIME, BPTIME, NTIME. (1.34)Optimization: Opt, Alg, Lp, Sdp. (1.35)Small operators:

{alg:cap}

(1.36)

 Σ, Π, Σ, Π .

Brackets:

1.III.1 Notation

Plain:

Plain:		
	a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,z,x,y	(1.38)
	$\alpha,\beta,\gamma,\delta,\epsilon,\epsilon,\zeta,\eta,\theta,\vartheta,\iota,\kappa,\varkappa,\lambda,\mu,\nu,\xi,\pi,\omega,\rho,\varrho,\sigma,\zeta,\tau,\upsilon,\phi,\varphi,\chi,\psi,\omega$	(1.39)
	$\Gamma, \Delta, \Theta, \Lambda, \Xi, \Sigma, \Phi, \Psi, \Omega, Y$	(1.40)
	A, B, C, D, E, F, G, H, I, L, M, N, O, P, Q, R, S, T, U, V, Z, X, Y, J, K.	(1.41)
Math ducth:		
	a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,x,s,t,u,v,z,x,y	(1.42)
	$\mathcal{A},\mathcal{B},\mathcal{C},\mathcal{D},\mathcal{E},\mathcal{F},\mathcal{G},\mathcal{H},\mathcal{I},\mathcal{L},\mathcal{M},\mathcal{N},\mathcal{O},\mathcal{P},\mathcal{Q},\mathcal{R},\mathcal{S},\mathcal{T},\mathcal{U},\mathcal{V},\mathcal{Z},\mathcal{X},\mathcal{Y},\mathcal{G},\mathcal{K}.$	(1.43)
Math bold dutch:		()
	$a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, \tau, s, t, u, v, z, x, y$	(1.44)
	$\mathcal{A},\mathcal{B},\mathcal{C},\mathcal{D},\mathcal{E},\mathcal{F},\mathcal{G},\mathcal{H},\mathcal{I},\mathcal{L},m,n,\Theta,\mathcal{P},\mathcal{Q},\mathcal{R},\mathcal{S},\mathcal{T},\mathcal{U},\mathcal{V},\mathcal{Z},\mathcal{X},\mathcal{Y},\mathcal{G},\mathcal{K}.$	(1.45)
Calligraphic:	$\mathcal{A}, \mathcal{B}, \mathcal{C}, \mathcal{D}, \mathcal{E}, \mathcal{F}, \mathcal{G}, \mathcal{H}, \mathcal{I}, \mathcal{L}, \mathcal{M}, \mathcal{N}, \mathcal{O}, \mathcal{P}, \mathcal{Q}, \mathcal{R}, \mathcal{S}, \mathcal{T}, \mathcal{U}, \mathcal{V}, \mathcal{Z}, \mathcal{X}, \mathcal{Y}, \mathcal{J}, \mathcal{K}.$	(1.46)
Scr:	$\mathcal{B},\mathcal{C},\mathcal{D},\mathcal{E},\mathcal{F},\mathcal{G},\mathcal{H},\mathcal{I},\mathcal{L},\mathcal{M},\mathcal{N},\mathcal{O},\mathcal{P},\mathcal{Q},\mathcal{R},\mathcal{F},\mathcal{T},\mathcal{U},\mathcal{V},\mathcal{Z},\mathcal{X},\mathcal{Y},\mathcal{J},\mathcal{K}.$	(1.47)
BB (notice no Exp	pectation symbol):	
	$\mathbb{A}, \mathbb{B}, \mathbb{C}, \mathbb{DF}, \mathbb{G}, \mathbb{H}, \mathbb{I}, \mathbb{L}, \mathbb{M}, \mathbb{N}, \mathbb{O}, \mathbb{P}, \mathbb{Q}, \mathbb{R}, \mathbb{S}, \mathbb{T}, \mathbb{U}, \mathbb{V}, \mathbb{Z}, \mathbb{X}, \mathbb{Y}, \mathbb{J}, \mathbb{K}.$	(1.48)
Random varia		,
	a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, z, x, y	(1.49)
	$\alpha, \beta, \gamma, \delta, \epsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, \pi, \pi, \rho, \sigma, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega$	(1.50)
vector:	a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, z, x, y	(1.51)
	$\alpha,\beta,\gamma,\delta,\epsilon,,\zeta,\eta,\theta,\iota,\kappa,\lambda,\mu,\nu,\xi,\pi,\pi,\rho,\sigma,\sigma,\tau,\nu,\phi,\chi,\psi,\omega$	(1.52)
matrix:	A,B,C,D,E,F,G,H,I,L,M,N,O,P,Q,R,S,T,U,V,Z,X,Y,J,K.	(1.53)
	$\Gamma, \Delta, \Theta, \Lambda, \Xi, \Sigma, \Phi, \Psi, \Omega, Y$	(1.54)
random vector:		
	a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, z, x, y	(1.55)
	$\alpha,\beta,\gamma,\delta,\varepsilon,,\zeta,\eta,\theta,\iota,\kappa,\lambda,\mu,\nu,\xi,\pi,\pi,\rho,\sigma,\sigma,\tau,\upsilon,\varphi,\chi,\psi,\omega$	(1.56)
random matrix:		
	A, B, C, D, E, F, G, H, I, L, M, N, O, P, Q, R, S, T, U, V, Z, X, Y, J, K	(1.57)
	$\Gamma, \Delta, \Theta, \Lambda, \Xi, \Sigma, \Phi, \Psi, \Omega, \Upsilon$	(1.58)
tensor:	A, B, C, D, E, F, G, H, I, L, M, N, O, P, Q, R, S, T, U, V, Z, X, Y, J, K.	(1.59)
entries of vector:		(2.62)
	a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,z,x,y	(1.60)
entries of matrix:	A, B, C, D, E, F, G, H, I, L, M, N, O, P, Q, R, S, T, U, V, Z, X, Y, J, K.	(1.61)
entries of tensor:	A,B,C,D,E,F,G,H,I,L,M,N,O,P,Q,R,S,T,U,V,Z,X,Y,J,K.	(1.62)

2 A SECTION

Final Version as of June 18, 2024 (classicthesis). Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

2.1 A Subsection

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2.II A Subsection

3 A SECTION

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REFERENCES

Miede, André (2024). Classic Thesis Template. https://www.miede.de/. (Visited on 05/18/2024).