Explanation: The purpose of this file is to include all necessary biblatex entries for the project from All.bib developed by Le Chen [Che23]. The bib file

```
Fox-H_biber.bib
```

is generated by running the following command:

- > biber —output_format=bibtex —output_resolve Fox-H.bcf
- > biber Fox_H

The Fox H-function plays a fundamental role in expressing the fundamental solutions to our equations. It is a generalization of the Meijer G-function (see Chapter 16 of [Olv+10]).

- 1. The ordinal paper: [Fox61];
- 2. Chapters 1 and 2 of [KS04];
- 3. Section 1.12 of [KST06];
- 4. Section 8.2 of [PBM90];
- 5. The books by Mathai and Saxea [MSH10; MS78];
- 6. The book by [EIK04];
- 7. The books by [Erd+81a; Erd+81b];
- 8. About this repo: [CH23].

In the context of the stochastic partial differential equations (SPDEs), the Fox H-function is used to express the fundamental solutions for the slow and fast diffusion equations; see, e.g., [Che+17], [CHN19], [CE22], [CH22], [CHS22], [MN15].

References

- [CE22] Le Chen and Nicholas Eisenberg. "Interpolating the stochastic heat and wave equations with time-independent noise: solvability and exact asymptotics". In: Stoch. Partial Differ. Equ. Anal. Comput. (in press) (Aug. 2022). URL: https://www.arxiv.org/abs/2108. 11473.
- [CGS22] Le Chen, Yuhui Guo, and Jian Song. "Moments and asymptotics for a class of SPDEs with space-time white noise". In: preprint arXiv:2206.10069, to appear in Trans. Amer. Math. Soc. (June 2022). URL: https://www.arxiv.org/abs/2206.10069.
- [CH22] Le Chen and Guannan Hu. "Hölder regularity for the nonlinear stochastic time-fractional slow & fast diffusion equations on \mathbb{R}^d ". In: Fract. Calc. Appl. Anal. 25.2 (2022), pp. 608–629. ISSN: 1311-0454. DOI: 10.1007/s13540-022-00033-3. URL: https://doi.org/10.1007/s13540-022-00033-3.

- [CH23] Le Chen and Guannan Hu. Some symbolic tools for the Fox H-function. Nov. 2023. DOI: 10.5281/zenodo.10143785. URL: https://github.com/chenle02/Fox-H Symbolic Tools.
- [Che+17] Le Chen, Guannan Hu, Yaozhong Hu, and Jingyu Huang. "Spacetime fractional diffusions in Gaussian noisy environment". In: Stochastics 89.1 (2017), pp. 171–206. ISSN: 1744-2508. DOI: 10.1080/17442508. 2016. 1146282. URL: https://doi.org/10.1080/17442508.2016. 1146282.
- [Che23] Le Chen. SPDEs-Bib: A Comprehensive Bibliography of Stochastic Partial Differential Equations and Related Topics. Nov. 2023. DOI: 10.5281/zenodo.10143431. URL: https://spdes-bib.readthedocs.io.
- [CHN19] Le Chen, Yaozhong Hu, and David Nualart. "Nonlinear stochastic time-fractional slow and fast diffusion equations on \mathbb{R}^d ". In: Stochastic Process. Appl. 129.12 (2019), pp. 5073–5112. ISSN: 0304-4149. DOI: 10.1016/j.spa.2019.01.003. URL: https://doi.org/10.1016/j.spa.2019.01.003.
- [EIK04] Samuil D. Eidelman, Stepan D. Ivasyshen, and Anatoly N. Kochubei. Analytic methods in the theory of differential and pseudo-differential equations of parabolic type. Vol. 152. Operator Theory: Advances and Applications. Birkhäuser Verlag, Basel, 2004, pp. x+387. ISBN: 3-7643-7115-3. DOI: 10.1007/978-3-0348-7844-9. URL: https://doi.org/10.1007/978-3-0348-7844-9.
- [Erd+81a] Arthur Erdélyi, Wilhelm Magnus, Fritz Oberhettinger, and Francesco G. Tricomi. Higher transcendental functions. Vol. I. Based on notes left by Harry Bateman, Reprint of the 1953 original. Robert E. Krieger Publishing Co., Inc., Melbourne, Fla., 1981, pp. xviii+396. ISBN: 0-89874-069-X.
- [Erd+81b] Arthur Erdélyi, Wilhelm Magnus, Fritz Oberhettinger, and Francesco G. Tricomi. Higher transcendental functions. Vol. II. Based on notes left by Harry Bateman, With a preface by Mina Rees, With a foreword by E. C. Watson, Reprint of the 1953 original. Robert E. Krieger Publishing Co., Inc., Melbourne, Fla., 1981, pp. xiii+302. ISBN: 0-89874-069-X.
- [Fox61] Charles Fox. "The G and H functions as symmetrical Fourier kernels". In: $Trans.\ Amer.\ Math.\ Soc.\ 98\ (1961),\ pp.\ 395-429.\ ISSN: 0002-9947.\ DOI: 10.2307/1993339.\ URL: https://doi.org/10.2307/1993339.$
- [KS04] Anatoly A. Kilbas and Megumi Saigo. *H-transforms*. Vol. 9. Analytical Methods and Special Functions. Theory and applications. Chapman & Hall/CRC, Boca Raton, FL, 2004, pp. xii+389. ISBN: 0-415-29916-0. DOI: 10.1201/9780203487372. URL: https://doi.org/10.1201/9780203487372.

- [KST06] Anatoly A. Kilbas, Hari M. Srivastava, and Juan J. Trujillo. Theory and applications of fractional differential equations. Vol. 204. North-Holland Mathematics Studies. Elsevier Science B.V., Amsterdam, 2006, pp. xvi+523. ISBN: 978-0-444-51832-3; 0-444-51832-0.
- [MN15] Jebessa B. Mijena and Erkan Nane. "Space-time fractional stochastic partial differential equations". In: Stochastic Process. Appl. 125.9 (2015), pp. 3301–3326. ISSN: 0304-4149. DOI: 10.1016/j.spa.2015. 04.008. URL: https://doi.org/10.1016/j.spa.2015.04.008.
- [MS78] A. M. Mathai and R. K. Saxena. The H-function with applications in statistics and other disciplines. Halsted Press [John Wiley & Sons], New York-London-Sydney, 1978, pp. xii+192. ISBN: 0-470-26380-6.
- [MSH10] A. M. Mathai, Ram Kishore Saxena, and Hans J. Haubold. *The H-function*. Theory and applications. Springer, New York, 2010, pp. xiv+268. ISBN: 978-1-4419-0915-2. DOI: 10.1007/978-1-4419-0916-9. URL: https://doi.org/10.1007/978-1-4419-0916-9.
- [Olv+10] Frank W. J. Olver, Daniel W. Lozier, Ronald F. Boisvert, and Charles W. Clark. NIST handbook of mathematical functions. With 1 CD-ROM (Windows, Macintosh and UNIX). U.S. Department of Commerce, National Institute of Standards and Technology, Washington, DC; Cambridge University Press, Cambridge, 2010, pp. xvi+951. ISBN: 978-0-521-14063-8.
- [PBM90] A. P. Prudnikov, Yu. A. Brychkov, and O. I. Marichev. *Integrals and series. Vol. 3.* More special functions, Translated from the Russian by G. G. Gould. Gordon and Breach Science Publishers, New York, 1990, p. 800. ISBN: 2-88124-682-6.