

# ADVENTUROUS BERKELEY COMPLEX DYNAMICS

MSRI Workshop  
May 2 to 6, 2022

- [1] M. ABATE, E. BEDFORD, M. BRUNELLA, T.-C. DINH, D. SCHLEICHER, and N. SIBONY, *Holomorphic dynamical systems* (Cetraro, Italy, 2008), Lecture Notes in Mathematics **1998**, Springer, Berlin, Germany, 2010, edited by G. Gentili, J. Guenot, and G. Patrizio. ISBN 978-3-642-13170-7. MR 2572393. Zbl 1195.37006. doi: 10.1007/978-3-642-13171-4.
- [2] D. S. ALEXANDER, F. IAVERNARO, and A. ROSA, *Early days in complex dynamics: A history of complex dynamics in one variable during 1906–1942*, History of Mathematics **38**, American Mathematical Society, Providence, RI, 2012, ISBN 978-0-8218-4464-9. MR 2857586. Zbl 1244.37002. doi: 10.1090/hmath/038.
- [3] *Arnold Mathematical Journal*, special issue dedicated to Misha Lyubich’s 60th birthday following the conference “Analytic Low-Dimensional Dynamics”, Fields Institute, Toronto, ON, May 27–June 7, 2019, *Arnold Mathematical Journal* **6** (December 2020), no. 3–4, Yang, J. et al. Issue editors Benini, A. M. et al. <https://link.springer.com/journal/40598/volumes-and-issues/6-3>.
- [4] M. AUDIN, *Fatou, Julia, Montel, le grand prix des sciences mathématiques de 1918, et après ...*, Springer, Berlin, Germany, 2009, ISBN 978-3-642-00445-2. MR 2533395. Zbl 1179.01017. doi: 10.1007/978-3-642-00446-9.
- [5] A. F. BEARDON, *Iteration of rational functions: Complex analytic dynamical systems*, Graduate Texts in Mathematics **132**, Springer, New York, NY, 1991, ISBN 0-387-97589-6. MR 1128089. Zbl 0742.30002.
- [6] A. BONIFANT, M. LYUBICH, and S. SUTHERLAND (eds.), *Frontiers in complex dynamics: In celebration of John Milnor’s 80th birthday*, Princeton Mathematical Series **51**, Princeton University Press, Princeton, NJ, 2014, ISBN 978-0-691-15929-4. MR 3289442. Zbl 1285.37001. doi: 10.1515/9781400851317.
- [7] M. BONK and D. MEYER, *Expanding Thurston maps*, Mathematical Surveys and Monographs **225**, American Mathematical Society, Providence, RI, 2017, ISBN 978-0-8218-7554-4. MR 3727134. Zbl 1430.37001. doi: 10.1090/surv/225.
- [8] L. CARLESON and T. W. GAMELIN, *Complex dynamics*, Universitext: Tracts in Mathematics, Springer, New York, NY, 1993, ISBN 0-387-97942-5. MR 1230383. Zbl 0782.30022. doi: 10.1007/978-1-4612-4364-9.
- [9] D. CERVEAU, E. GHYS, N. SIBONY, and J.-C. YOCCOZ, *Complex dynamics and geometry*, SMF/AMS Texts and Monographs **10**, American Mathematical Society, Providence, RI, 2003, ISBN 0-8218-3228-X. MR 2017612. Zbl 1023.00019.
- [10] R. L. DEVANEY (ed.), *Complex dynamical systems: The mathematics behind the Mandelbrot and Julia sets* (Cincinnati, OH, 1994), Proceedings of Symposia in Applied Mathematics **49**, American Mathematical Society, Providence, RI, 1994, ISBN 0-8218-0290-9. MR 1315531. Zbl 0809.00024. doi: 10.1090/psapm/049.
- [11] M. FLEXOR, P. SENTENAC, and J.-C. YOCCOZ (eds.), *Géométrie complexe et systèmes dynamiques* (Orsay, France, 1995), Astérisque **261**, Société Mathématique de France, Paris, France, 2000. MR 1755434. Zbl 0932.00046. [http://numdam.org/issues/AST\\_2000\\_\\_261\\_](http://numdam.org/issues/AST_2000__261_).
- [12] L. R. GOLDBERG and A. V. PHILLIPS (eds.), *Topological methods in modern mathematics* (Stony Brook, NY, 1991), Publish or Perish, Houston, TX, 1993. MR 1215954. Zbl 0780.00031.

---

*Date:* February 1, 2022.

Bibliography by Roland Roeder and Jasmin Raissy.

- [13] J. H. HUBBARD, *Teichmüller theory and applications to geometry, topology, and dynamics, 1: Teichmüller theory*, Matrix Editions, Ithaca, NY, 2006. MR 2245223. Zbl 1102.30001.
- [14] J. H. HUBBARD, *Teichmüller theory and applications to geometry, topology, and dynamics, 2: Surface homeomorphisms and rational functions*, Matrix Editions, Ithaca, NY, 2016, ISBN 978-1-943863-00-6. MR 3675959. Zbl 1398.30001.
- [15] J. H. HUBBARD, *Teichmüller theory and applications to geometry, topology, and dynamics, 3: Manifolds that fiber over the circle*, Matrix Editions, Ithaca, NY, 2022, ISBN 978-1-943863-01-3.
- [16] O. E. LANFORD, III and M. YAMPOLSKY, *Fixed point of the parabolic renormalization operator*, SpringerBriefs in Mathematics, Springer, Cham, Switzerland, 2014, ISBN 978-3-319-11706-5; 978-3-319-11707-2. MR 3308117. Zbl 1342.37051. doi: 10.1007/978-3-319-11707-2.
- [17] C. T. MCMULLEN, *Complex dynamics and renormalization*, Annals of Mathematics Studies **135**, Princeton University Press, Princeton, NJ, 1994, ISBN 0-691-02982-2; 0-691-02981-4. MR 1312365. Zbl 0822.30002. doi: 10.1515/9781400882557.
- [18] C. T. MCMULLEN, *Renormalization and 3-manifolds which fiber over the circle*, Annals of Mathematics Studies **142**, Princeton University Press, Princeton, NJ, 1996, ISBN 0-691-01154-0; 0-691-01153-2. MR 1401347. Zbl 0860.58002. doi: 10.1515/9781400865178.
- [19] J. MILNOR, *Dynamics in one complex variable*, 3rd ed., Annals of Mathematics Studies **160**, Princeton University Press, Princeton, NJ, 2006, ISBN 978-0-691-12488-9; 0-691-12488-4. MR 2193309. Zbl 1085.30002. doi: 10.1515/9781400835539.
- [20] D. SCHLEICHER (ed.), *Complex dynamics: Families and friends*, A K Peters, Wellesley, MA, 2009, ISBN 978-1-56881-450-6. MR 1500163. Zbl 1161.37003. doi: 10.1201/b10617.
- [21] L. TAN (ed.), *The Mandelbrot set, theme and variations*, London Mathematical Society Lecture Note Series **274**, Cambridge University Press, Cambridge, UK, 2000, ISBN 0-521-77476-4. MR 1765080. Zbl 0935.00019. doi: 10.1017/CBO9780511569159.