

SEMINÁRIO DE ANÁLISE

Uma conversa sobre integração não absoluta

Márcia Federson
Universidade de São Paulo

23/03/18
10:30Horas

Auditório do MAT

Abstract. Fazemos uma revisão histórica sobre algumas integrais, desde Newton, passando por Cauchy e Riemann, até Kurzweil e Henstock, passando por Lebesgue e Feynman. Apresentamos aspectos interessantes sobre a integral não absoluta de Kurzweil-Henstock.

Referências

- [1] R.G. Bartle, *A Modern Theory of Integration*, Graduate Studies in Math., v. 32, American Math. Society, 2001.
- [2] E.M. Bonotto; M. Federson; P. Muldowney, A Feynman-Kač solution to a random impulsive equation of Schrödinger type, *Real Anal. Exchange* 36(1), (2010/2011), 107-148.
- [3] P. Bullen, Non-absolute integrals in the twentieth century, AMS Special Session on Non-Absolute Integration, Toronto, 23-24 September, 2000. <https://www.emis.de/proceedings/Toronto2000/papers/bullen.pdf>
- [4] F. Burk, *A Garden of Integrals*, Mathematical Association of America, 2012.
- [5] R.P. Feynman; R.B. Leighton; M. Sands, *The Feynman Lectures on Physics*, Addison-Wesley, 1964.
- [6] R.A. Gordon, *The Integrals of Lebesgue, Denjoy, Perron, and Henstock*, Graduate Studies in Math. v. 4, American Math. Society, 1994.
- [7] J. Mawhin, Two histories of integration theory: Riemannesque vs Romanesque. *Acad. Roy. Belg. Bull. Cl. Sci.* 18(6) (2007), 47-63.
- [8] P. Muldowney, Feynman's path integrals and Henstock's non-absolute integration, *J. Appl. Anal.* 6(1), (2000), 1-24.
- [9] Š. Schwabik, *Generalized Ordinary Differential Equations*, World Scientific, Singapore, Series in Real Anal., vol. 5, 1992.