Frigyes Riesz

Frigyes Riesz (Hungarian: *Riesz Frigyes,* pronounced [ˈriːs ˈfriɟɛʃ]; 22 January 1880 – 28 February 1956) was a Hungarian[1][2] mathematician who made fundamental contributions to functional analysis, as did his younger brother Marcel Riesz.

Contents

Frigyes Riesz	
Born	22 January 1880 Győr, Austria-Hungary
Died	28 February 1956 (aged 76) Budapest, Hungary
Citizenship	Hungarian
Known for	functional analysis integral equations ergodic theory Riesz representation theorem Riesz–Fischer theorem Riesz space Hardy space L^p space Riesz's lemma Radon–Riesz property proximity space F. and M. Riesz theorem
Scientific career	
Fields	Mathematics

Life and career

He was born into a Jewish family in Győr, Austria-Hungary and died in Budapest, Hungary. Between 1911 and 1919 he was a professor at the Franz Joseph University in Kolozsvár, Austria-Hungary. The post-WW1 Treaty of Trianon transferred former Austro-Hungarian territory including Kolozsvár to the Kingdom of Romania, whereupon Kolozsvár's name changed to Cluj and the University of Kolozsvár moved to Szeged, Hungary, becoming the University of Szeged.[3] Then, Riesz was the rector and a professor at the University of Szeged, as well as a member of the Hungarian Academy of Sciences.[4] and the Polish Academy of Learning. He was the older brother of the mathematician Marcel Riesz.

Riesz did some of the fundamental work in developing functional analysis and his work has had a number of important applications in physics. He established the spectral theory for bounded symmetric operators in a form very much like that now regarded as standard.[1] He also made many contributions to other areas including ergodic theory and he gave an elementary proof of the mean ergodic theorem.

Riesz founded the Acta Scientiarum Mathematicarum journal together with Alfréd Haar.

Doctoral advisor	Gyula Vályi
Doctoral students	János Aczél
	Steven Gaal
	Tibor Radó
	Alfréd Rényi

He had an uncommon method of giving lectures: he entered the lecture hall with an assistant and a docent. The docent then began reading the proper passages from Riesz's handbook and the assistant wrote the appropriate equations on the blackboard—while Riesz himself stood aside, nodding occasionally.[5]

The Swiss-American mathematician Edgar Lorch spent 1934 in Szeged working under Riesz and wrote a reminiscence about his time there, including his collaboration with Riesz.[3]

Publications

- Riesz, Frigyes; Szőkefalvi-Nagy, Béla (1990) [1955]. *Functional Analysis*. New York: Dover Publications. ISBN 978-0-486-66289-3.

See also

- Denjoy–Riesz theorem
- Riesz representation theorem
- F. and M. Riesz theorem
- Proximity space
- Riesz-Fischer theorem
- Riesz space
- Radon-Riesz property
- Riesz's lemma

References

1. Eberhard Zeidler: Nonlinear Functional Analysis and Its Applications: Linear monotone operators. Springer, 1990 [1] (https://books.google.com/books?id=sk1M2Vw-Y24C&pg=PA13)
2. Calendar of Historical Events, Births, Holidays and Observances (https://books.google.com/books?id=t4YZUcjx6poC&pg=PT409)
3. Lorch, Edgar R. (1993). Hersh, Rubem (ed.). "Szeged in 1934" (http://www.maa.org/programs/maa-awards/writing-awards/szeged-in-1934). *Amer. Math. Monthly*. **100** (3): 219–230. doi:10.2307/2324453 (https://doi.org/10.2307%2F2324453). JSTOR 2324453 (https://www.jstor.org/stable/2324453).
4. János Horváth: *A Panorama of Hungarian Mathematics in the Twentieth Century*, Volume 1, Springer, 2006 [2] (https://books.google.com/books?id=EWm4WzSaG3IC&pg=PA581)
5. Wróblewski, Andrzej Kajetan (September 2008). "Czyściec, niebo i piekło". *Wiedza i Życie*: 65.

External links

- Frigyes Riesz (https://www.genealogy.math.ndsu.nodak.edu/id.php?id=11321) at the Mathematics Genealogy Project
- O'Connor, John J.; Robertson, Edmund F., "Frigyes Riesz" (http://www-history.mcs.st-andrews.ac.uk/Biographies/Riesz.html), *MacTutor History of Mathematics archive*, University of St

Andrews.

- Hersh, Reuben; John-Steiner, Vera (1993). "A Visit to Hungarian Mathematics" (http://www.un m.edu/~vygotsky/hungary.pdf) (PDF). *Mathematical Intelligencer*. **15** (2): 13–26. doi:10.1007/bf03024187 (https://doi.org/10.1007%2Fbf03024187).