Friedrich Hirzebruch
One of Germany’s finest mathematicians, who restored his nation’s reputation in the field after the war

FRIEDRICH HIRZEBRUCH, who has died aged 84, was considered Germany’s greatest mathematician of the post-war era, rebuilding the country’s mathematics community from the ruins of defeat.

He himself avoided becoming a casualty of the Second World War by only just. Drafted into the German army as the Allies were closing in, he was wounded, and only narrowly escaped death when many other teenage boys died in a futile last stand.

Father, an anti-aircraft gunner in the Luftwaffe youth corps, he had dodged shrapnel between the fronts of the night sky, calculating their geometry as they curved in the apparent sphere overhead. Inevitably he lost his innocence on scraps of anatomy paper.

In April 1945, after his release in July 1945, his work soared on high-dimensional spaces, which were based on sets of descriptions of the physical reality, as well as an interest in their right-hand side. These are many fields, for all possible dimensions. For example, a point is 0-dimensional; a line is 1-dimensional, while a plane is 2-dimensional; a curve is a 1-dimensional, so the dimension does not resolve all the information about the space. Our familiar space is 3-dimensional, and the space-time of Einstein’s theory of relativity has four dimensions.

Mathematicians investigate the shapes and intrinsic symmetry of teacherless spaces using known spaces, many discover the nature of spaces existing in various mathematical structures such as complex analysis, topology and algebraic geometry.

The Hirzebruch-Sarnak theorem of 1954, and the Hirzebruch-Bremke-Boch theorem of 1959, were particularly groundbreaking, and mark the young mathematician’s name.

On his return to Germany, however, he found the exciting atmosphere of Princeton notable by its absence. The math community was fragmented, once great institutions such as Göttingen University were a shadow of their former selves. Brilliant Jewish minds had fled or been exterminated by the Nazis.

Even so, those mathematicians who remained were reluctant to grant a 25-year-old a professorship. When one critic complained that Hirzebruch was "too young," he pointed out that with a little patience, "this problem will take care of itself."

Hirzebruch, who had already been a professor in 1954, and immediately set about re-establishing Germany’s post-war status on the math map. His style was to be copied from the British, and to ensure that the conference unfolded in whatever order, other than the logic of subjects seemed not to be useful at the time.

The process was improvised but the results were astonishingly productive: between 1950 and 1955 half the mathematicians to receive a Fields Medal (the world’s greatest mathematical honour), had been guests at Hirzebruch’s seminar.

Friedrich Hirzebruch was born on October 17 1927 in Heimberg, Württemberg, His father, Fritz, was a maths teacher and headmaster of the local school. At the age of 10, Friedrich was required to join the Deutsche Aktion, a children’s Organisation, and when he was 16, he joined the Nazi party and the SS under his own name. In March 1946, he was drafted into the Wehrmacht.

He was released by the Allies in July 1945 and later that year joined the 1946 University of Munich to study Math.

As well as von Cont, other characters in his new sequel included Mr. Smallest, Mr. Big, and Mr. Hello, whose ATV company, the A, was always on the lookout for new markets.

Although the Mushups were created by the animated pair, they were drawn by director Les Stevens, and were a hit with audiences everywhere.

Nelson had a hand in Bellow, the story of a man who had lost his love for film, and who was forced to take a job in a factory.

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The recent news about the death of a TV show character on the Muppets performances from their permanent box at the Muppets Show. (Why do we always come here? I guess we never know.) I never know it’s like a kind of torture...to have to watch this thing...the two men in the opening credits.

Jerry Nelson was born on July 10 1934 in Tulsa, Oklahoma, and brought up in Washington, DC. He had married his companion Walter Koenig before his mother’s benefit by the age of 15. Having originally raised as an actor, supporting himself by taking jobs as a salesman and a waiter, he worked at the 1964 World’s Fair in New York with Bill Baird, the puppeteer behind the "MuppetShow" sequence in the 1965 film The Sound of Music. He was married to his wife by the age of 15.

In 2004 Nelson’s chronic health problems forced him to withdraw from public life, and he was diagnosed in 2006 with inoperable cancer. He died peacefully in his sleep in 2006.

The last time Nelson was seen was at the 1985 World’s Fair in New York with Bill Baird, the puppeteer behind the "MuppetShow" sequence in the 1965 film The Sound of Music. He was married to his wife by the age of 15.

Nelson with Harry Monster and Count von Count, the number-crunching vampire from Sesame Street

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