

ANALYSE THIS

Kerala scholars cracked math code before Newton

Vijay Dutt
London, August 13



JAYANTO

A LITTLE-KNOWN school of scholars in Kerala discovered one of the founding principles of modern mathematics much before Sir Isaac Newton, to whom the finding is currently attributed, a new research here says.

Dr George Gheverghese Joseph, an

Honorary Reader of the University of Manchester, says the 'Kerala School of Mathematics and Astronomy' identified the 'Infinite Series' — one of the basic components of calculus — in about 1350.

"The 'Infinite Series' was identified by these little-known scholars in Kerala all of whom were from within 500 km of Cochin," Dr Joseph, hailing from Kottayam, told HT. The scholars

of the school also discovered what amounted to the Pi series and used it to calculate Pi correct to 17 decimals.

The research, carried out by teams led by Dr Joseph and Dennis Almeida of the University of Exeter, found evidence that the Indians passed on their discoveries to Jesuit missionaries who visited India during the 15th century.

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Calculus from Kerala School

LONDON: A little-known school of scholars in southern India discovered one of the founding principles of modern mathematics hundreds of years before Sir Isaac Newton, to whom the finding is currently attributed, according to new research findings announced here.

George Gheverghese Joseph, an academic and author, says the 'Kerala School' identified the 'infinite series', one of the basic components of calculus, circa 1350.

The discovery is attributed in books to Sir Isaac Newton and Gottfried Leibnitz at the end of the 17th century, the University of Manchester reported on its website.

The Manchester-Exeter universities team said the Kerala School had also discovered what amounted to the Pi series and used it to calculate Pi correct to 9, 10 and later 17 decimal places.

And there is strong circumstantial evidence that Indians passed on their discoveries to mathematically savvy Jesuit missionaries who visited India during the 15th century. That knowledge, the researchers argue, may have been passed on to Newton.

The research was carried out by Dr. Joseph, Honorary Reader, School of Education at The

University of Manchester and Dennis Almeida, Teaching Fellow at the School of Education, The University of Exeter.

Dr. Joseph, who hails from Kerala, made the finding while trawling through obscure Indian papers for a third edition of his book *The Crest of the Peacock: the Non-European Roots of Mathematics*, the report said.

Forgotten

Dr. Joseph said: "The beginnings of modern maths is usually seen as a European achievement but the discoveries in medieval India between the 14th and 16th centuries have been ignored or forgotten... The brilliance of Newton's work at the end of the 17th century stands undiminished — especially when it came to the algorithms of calculus. But other names from the Kerala School, notably Madhava and Nilakantha, should stand shoulder to shoulder with him as they discovered the other great component of calculus — infinite series."

Dr. Joseph attributed the non-acknowledgment of the contribution of the Kerala school to the neglect of scientific ideas emanating from the Non-European world, "a legacy of European colonialism and beyond." — PTI

Indian scholars predated Newton find by 250 yrs

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The discovery is currently attributed in books to Sir Isaac Newton and Gottfried Leibnitz at the

end of the 17th centuries, the University of Manchester reported in its website on Monday.

The team from the Universities of Manchester and Exeter reveal the Kerala School also discovered what amounted to the Pi series and used it to calculate Pi correct to 9, 10 and later 17 decimal places.

And there is strong circumstantial evidence that the Indians passed on their discoveries to mathematically knowledgeable Jesuit mis-

sionaries who visited India during the 15th century.

That knowledge, the researchers argue, may have eventually been passed on to Newton himself.

ANCIENT TRUTH

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UNIVERSITY OF MANCHESTER

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Joseph made the revelations while trawling through obscure Indian papers for a yet to be published third edition

of his best selling book *The Crest of the Peacock: the Non-European Roots of Mathematics*, the report said.

"The beginnings of modern maths is usually seen as a European achievement but the discoveries in medieval India between the 14th and 16th centuries have been ignored or forgotten," Joseph said. "The brilliance of Newton's work at the end of the 17th century stands undiminished — especially when it came to the algorithms of calculus." PTI

Indians got maths right 250 yrs before Newton: study

PRESS TRUST OF INDIA
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