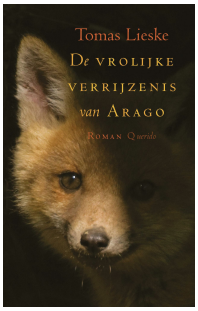
De vrolijke verrijzenis van Arago, *Tomas Lieske*, Querido, 2018 (287 p.) isbn: 978-902140897-2 (pbk).





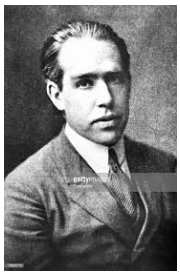
Tomas Lieske

What you need to know before reading this novel is that in 1920, when the new quantum physics was a hot topic, Leiden was an important center. Hendrik Lorentz (Nobel Prize 1902) decided to resign from Leiden University and asked Einstein to be his successor. However Einstein just accepted a position at ETH in Zürich, so Paul Ehrenfest became the successor of Lorentz. Ehrenfest founded the Institute of Theoretical Physics which became later the Lorentz Institute.

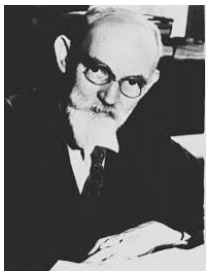
Ehrenfest was a Jew born in Vienna. A course by Boltzmann inspired him to become a theoretical physicist. His main contributions were in statistical mechanics. In 1902 he visited Lorentz in Leiden and later got a PhD in Vienna. In 1904 he married Tatyana Afanasyeva, a mathematician from Kiev who collaborated in his research. They had two daughters: Tanja (who became a mathematician), Galinka (who became a writer and illustrator) and two sons: Paul Jr. (who became a physicist) an Wassik (who had Down). The family travelled around visiting several universities, looking for a position. In Zürich he met Einstein and they became good friends. He was appointed in Leiden in 1912 and was later offered to succeed Lorentz. He was not the foremost physicist of his time, but he was an excellent teacher, invited many of the most important scientists of his time and had many famous students. Because of the situation of his friends in an emerging climate of nazism in 1931, he got in a deep depression, and after making arrangements for the rest of his family he shot his son Wassik, and then killed himself.



P. Ehrenfest



N. Bohr



W. De Sitter

Niels Bohr is a Danish physicist (Nobel Prize 1922) who is famous for many things, the atomic model and his contributions to quantum theory are probably best known. He was also a philosopher and an active opponent of nazism. Both Einstein and Bohr were regular visitors of the Ehrenfest home.

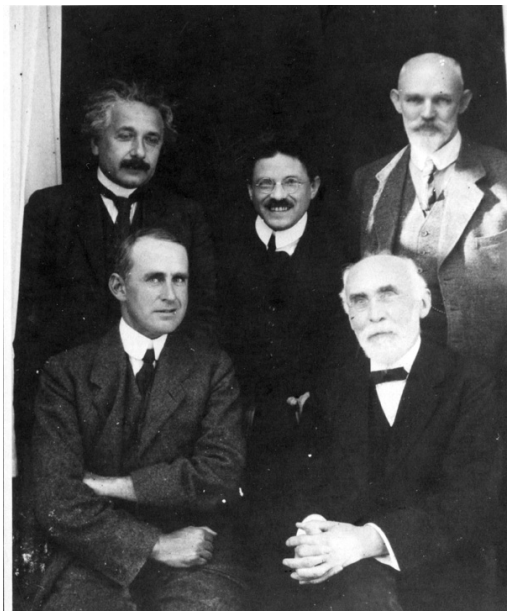
Willem De Sitter was a mathematician, astronomer, and cosmologist who became the director of the Leiden Observatory in 1918. He published with Einstein, he conceived the De Sitter space, and studied the moons of Jupiter. He was a friend of Ehrenfest as well.

Why all this is needed to read this novel by Tomas Lieske? The ouverture of the novel describes a 1924 scene where Ehrenfest and Bohr arrive in a Fiat automobile in a hotel. They go for a swim at midnight and Lise Werner rises from the water, riding with a motorcycle on a cable spanned to a platform.

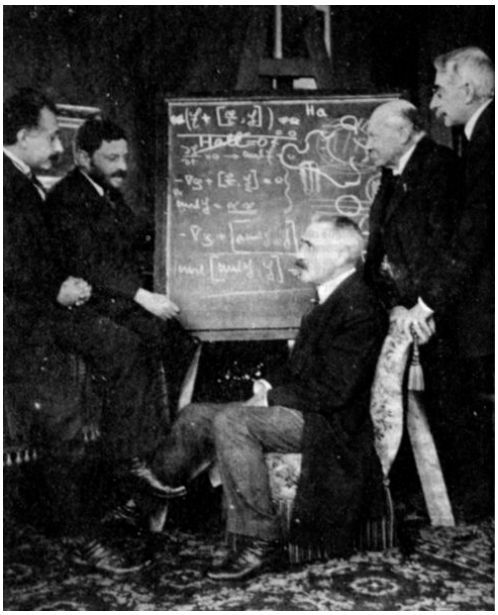
Then there is a time shift to 1999. A couple with their 15 year old daughter Joys are traveling in the same Fiat in the Dolomites. The mother was a model and got pregnant with Joys which ended her career. The reason they drove out there was to see the solar eclipse because the father has more than average interest in astronomy and science. He was constantly entertaining his daughter with facts, which can only annoy and irritate her. In a hairpin bend, a young fox on the road is overrun, Joys is thrown out of the car and after hitting a tree, the car with dead parents disappears over the edge of the precipice.

Then the story splits in two universes. There is Joys who is picked up by two weird hillbillies and brought to a hospital where she remains in a coma, she cannot see or communicate, but is aware of everything that is happening around her. In the other universe, Joys sees the fox rising from the asphalt, but does not remember her name or anything of her life. The fox starts following

her and she calls it Arago. Whether there is a link with the mathematician François Arago is not clear to me. They slowly start to trust each other and survive together in the woods until Arago is injured in a fight with a cat and they ask for help in the nearby house of Simone Werner who gives her the name Lise Werner. They decide to stay and live as mother, daughter, and pet. After 100 pages, there is a sudden switch in the novel. Simone turns out to be the niece of Paul Ehrenfest who writes a letter from Leiden inviting her and Lise to come and stay with them. They are welcome to help in the household.



Einstein, Ehrenfest, Lorentz (T)
Eddington, De Sitter (B)



(L) Einstein, Ehrenfest
(R) Langevin, Kamerligh Onnes, Pierre Weiss

Simone and Lise move to Leiden and meet all the famous physicists who were inventing new science with their thought experiments, thinking the unthinkable. With some problem they also succeed in bringing Arago to Leiden. De Sitter and Bohr are regular visitors and they become also friends of Simone and Lise. Ehrenfest is depressed, not being a top physicist like his visitors. He doesn't have time enough and his son Wassik has difficult periods where he is unmanageable, diverting him from his work. De Sitter takes Lise on a skating tour (Lise just happens to be a very good equilibrist). The visits of Niels Bohr are always rejoiced by the whole household. Even Ehrenfest switches to a better mood when Bohr is expected. Bohr, the athletic man (his brother was a soccer player), who is able to accept everything without prejudices, to think the unthinkable, invites Lise for a midnight swim (but she can prevent it). Looking after Wassik, she can sleep in a bedroom next to Bohr's. She has a secret crush on the scientist. Seven years passed and she is a young woman now.

The story is told interlacing what is happening in the hospital bed with Joys, who gets (real) visits from the two weird men that saved her and the (imaginary) visits from her parents who died in the car crash. We learn the two sides of all the characters: they all have something good, but also something really bad. Simone had killed two of her rapists, the two Samaritans who saved Joys were actually perverts, Ehrenfest is a positive person but has his depressions (shooting his son and his suicide is not part of the novel) and Joys the revolting insufferable puber is the antipole of the sweet Lise. The 1920 story ends with Arago being electrocuted and evaporating in a fireball. Eventually Joys awakes from her locked-in situation with the two peasants at her bedside who accompany her to an ethereal ending of the novel.

It is all impossible and hard to believe, and yet Lieske takes the reader along this surreal thought experiment of Joys who is living in a dream using all the elements her father has told her, to live the ideal life she will never have.

Adhemar Bultheel