

There are two more Leaning Towers in Pisa!

Church and bell tower of San Nicola, via Santa Maria



The construction of the building is prior to 1097. However, of the medieval style only the exterior and part of the façade remain today, since, starting from 1572, substantial restorations were carried out for the palace of the Grand Dukes of Tuscany, of which the church was an integral part. Despite the damage suffered during the Second World War, the façade still shows features of the **Pisan Romanesque** style. The **Bell tower**, also leaning, is a jewel of Romanesque architecture, the work is attributed to the master **Diotisalvi** and therefore presumably coeval with the Baptistery of Pisa (13th century). Inside there is a spiral staircase, for some the model for the well of San Patrizio in Orvieto and for the Bramante staircase in the Vatican Museums, leading to the belfry. The interior of the church is a large space with barrel vaults and a row of three side chapels plus two on the sides of the high altar. Among the works preserved inside, there is a Madonna with Child by **Francesco Traini** (first chapel on the right), a panel from 1428 representing San Nicola da Tolentino protecting Pisa, a work by **Borghese di Piero Borghese**, an iconic image of the city (third chapel on the right) and a small wooden Crucifix, a fourteenth-century work attributed to **Giovanni Pisano** (first chapel on the left of the main chapel).

The **Fibonacci sequence**: **Leonardo Pisano**, called Fibonacci, or filius Bonaccii, was one of the greatest mathematicians of the Middle Ages. Born in Pisa around 1175, son of Guglielmo Bonacci, a Pisan merchant, he began his education in the city of Bugia, near Algiers. There he became acquainted with the works of Euclid and the Arab mathematicians. Back in Pisa he presented the famous **Liber aabbaci** (1202), where he exhibited for the first time in Europe the Indian positional numbering, used by the Arabs. Very well-known is the Fibonacci sequence, in which each number is equal to the sum of the previous two, 0, 1, 1, 2, 3, 5, 8, 13... Recent studies, conducted by Pietro Armienti of the Department of Earth Science of the University of Pisa, have identified a relationship between the geometries of the inlay of the lunette above the original entrance portal on the façade of the church of San Nicola and the numerical sequence of the Pisan mathematician. Professor Armienti states that assuming 'as unitary the diameter of the smaller circles of the inlay, the larger ones have a double diameter, the following a triple one, while those with a diameter of 5 are divided into segments in the squares at the top of the square in which the main circle is inscribed, the central one has a diameter of 13 while the circle that circumscribes the squares in the corners has a diameter of 8. The other elements of the inlay arranged according to circular traces identify circumferences with radius 21 and 34, finally the circle that circumscribes the inlay has a diameter 55 times larger than the smaller circle. 1,2,3,5,8,13,21,34,55 are the first nine elements of the Fibonacci sequence'.

San Michele degli Scalzi



The name comes from the use, in the nineteenth and twentieth centuries, of the river banks as **beaches** equipped with **bagnetti**, small wooden constructions used for undressing and wearing swimwear. From **ponte della Vittoria**, a post-war construction that replaced the original dated 1934 (collapsed shortly after the inauguration), there is a real **river park**, with cafes and spaces for leisure and wellness, about 2 kilometres long. In 1852, the **Politeama Theatre** was inaugurated here. Unfortunately destroyed during the Second World War, was replaced by the **Palazzo dei Congressi** of Pisa. In the middle of the avenue is the **church of San Michele degli Scalzi in Orticaia**, mentioned in 1025, with the evident leaning bell tower. The toponym 'orticaia' can refer to the conditions of the ancient district, swampy and rich in nettles, but also to the vast concentration of gardens, *horticarum*, which once supplied the city. The church was restored and annexed to the convent of the Pulzanesi (Scalzi) Benedictine monks in 1178 and shows a façade marked by five blind arches with lozenges and recesses, typical of the **Pisan Romanesque** style. The lunette above the main portal of the *Blessing Christ* is a work dated 1204 that is affected by the **Byzantine influence** in the art schools of Pisa (the original is in the national museum of San Matteo). The bell tower, strongly inclined due to a subsidence of the ground, shows a clear reference to Lombard architecture in its increasing levels of multi-mullioned windows. Some copies of the ceramic basins of Islamic make that decorated the outside are still visible. The interior has three naves with Romanesque columns and capitals from the eleventh century as well as reclaimed and preserves a painted cross by the Pisan school from the 13th century.