## **Galileo's Father**

ver wonder about the source of Galileo's genius? What made him so curious and so experimental, and yet practical? He not only invented the telescope, he built and sold telescopes. He discovered Jupiter's four moons and named them after Medici princes. Famously, when the Inquisition attacked him, he retracted his "heresies," though according to legend (and Bertolt Brecht), he said under his breath, "Eppur si muove" — "and yet it moves" — in response to the Church's formal teaching that the Earth did NOT turn on its axis.

Part of the story might lie in his family history. Vincenzio, Galileo's father, was born in a Tuscan hill-town, Santa Maria a Monte, in 1520. This unpretentious little town was strategically important, lying between Florence, Pisa and Lucca, high above the Arno River. The castle (now an archaeological site at the top of the town) was destroyed by the Florentines in 1327. Today Santa Maria a Monte is a quiet place. In 1987 a conference about Vincenzio Galileo shed some light on



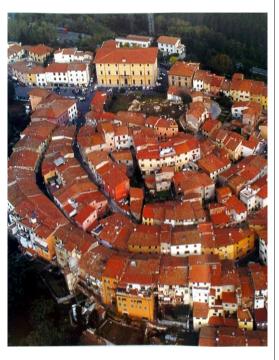
his music and his musical research. Patrizia Marchetti's guide to Santa Maria a Monte offers historical insights gleaned from the conference.

The Galileo family was Florentine by origin, but Vincenzio's grandfather apparently lost his fortune and left the city, perhaps fleeing from creditors. Vincenzio's father, Michelangelo Galilei, married a girl from Santa Maria a Monte and there the boy spent his first 20 years. After his father's death, Vincenzio was sent to Florence where he was under the patronage of Count Bardi. He studied music, learning to play the lute. In 1562 he moved back to Pisa, where he married Giulia Ventura and had 6 (some believe 7) children: the oldest of whom was Galileo. Vincenzio taught and wrote about music, developing new tablatures and experimenting with chords and pitch. He wrote about the history of music theory in ancient Greece and

composed madrigals for four and five voices. Despite his clear talent, Vincenzio never achieved great success with the Medici. After his death he was buried in the Galileo family tomb in Santa Croce, Florence. The young scientist Galileo became head of the family, and most surely provided guidance to his brothers and sisters.

Galileo's youngest brother became a lutenist like his father. So did Galileo's son (1606-1649), who was also named Vincenzio. Even more importantly, it seems that Galileo helped his father with his experiments. We know that music and mathematics are closely linked. Vincenzio Sr. discovered that on a stretched string, pitch varies according to the square root of the tension. Galileo the son later experimented with the pitch and frequency of sound.

Galileo – astrophysicist, philosopher and mathematician – was above all a mathematician. He taught at the University of Pisa,



then at the University of Padua. After 1610 he became mathematician and philosopher to the Tuscan Grand Duchy. Yet, as with his father and great-grandfather, fortune was unkind to Galileo. He was in poor health and condemned by the Church, placed under house arrest, not allowed to teach.

Nowadays in Santa Maria a Monte, you can walk past Casa Galilei, indicated by a plaque, but you can't enter because the house is privately owned. On the other hand, Casa Carducci stands alongside Casa Galilei. Here one can visit Antonio Possenti's art exhibit, which was inspired by Carducci's poetry.

Santa Maria a Monte has an astronomical observatory named for Isaac Newton and a band named for Giuseppe Verdi. Both Galileo and his father Vincenzio hardly seem to be remembered, except for the plaque on the wall (via Carducci 33).

A prophet is not without honor except in his home town.... (Matt. 13:57)