



From [News Center](#)

High-tech video game technology captures bass virtuoso's bow technique (5/23/2005)

What do Tiger Woods and Francois Rabbath have in common? The golfer and the renowned bass virtuoso, respectively, are the best in the world at what they do. And the same technology that captured Tiger's powerful swing in a video game has been used to record Rabbath's world-renowned bow technique.

Ball State University's [School of Music](#) collaborated with the university's [Biomechanics Lab](#) to create "Art of the Bow," a groundbreaking DVD that has preserved one of the music world's "sweetest swings."

Rabbath was born in Syria and later moved to France, where he studied at the Paris Conservatory. His album "The Sound of the Bass," released in the mid-1960s, shared Rabbath's amazing talent with the world, said Hans Sturm, professor of double bass at Ball State.

"When musicians listened to this album, they could not believe what they were hearing," he said. "In the last 40 years, musicians around the world sought him out and traveled to France to study with him."

Sturm, who has been studying with Rabbath for the past five years, listened on many occasions as his teacher bemoaned the difficulty of trying to describe the subtleties of his technique in words. While flying back from Paris, Sturm had an epiphany while reading an article on how the Tiger Woods video game was made.

"I thought to myself, 'If a golf swing, why not a bow stroke?'" Sturm said. "I called the Biomechanics Lab when I returned, and they were curious enough to help me pursue the idea."

Traditional music publications or videos are limited to illustrations, photographs or a viewpoint from a single camera. Employing high-speed digital cameras, "Art of the Bow" demonstrates the technique through a 3-D lesson using multiple camera angles and viewing options that isolate the subtle motions of the bassist's fingers, hands and arms.

Sturm worked with Eric Dugan, director of the Biomechanics Lab, to film the DVD. The process required Rabbath to don a form-fitting black suit with movement-tracking reflectors that allowed the cameras and computers to create a digital model of his movements. The video game technology affords students the ability to select and watch a lesson from a particular camera angle, scene by scene, in a simple, stick-figure format or a tubular format that demonstrates arm rotation.

"Rabbath is extraordinary in that he pioneered playing such a large instrument with such range, eloquence and beauty," Sturm said. "The DVD captures his unique technique and archives it so many generations of musicians will be able to continue to study it."

Rabbath is coming to the United States June 9 to address the Biennial International Society of Bassists Convention at Western Michigan University in Kalamazoo, Mich. More than 1,000 bassists from over 30 countries are registered, many of whom will attend Rabbath's presentation of "The Art of the

Bow DVD" at noon.

For more information, visit www.artofthebow.com.

[By Layne Cameron, Media Relations Manager](#)

