

1112-01-12            **Yousuf Kerai\*** (ykerai@gmail.com), 180-B Shabbirabad, Syedna Tayyeb Road, Karachi, Sindh  
75350, Pakistan, and **Glen Van Brummelen** and **Taro Mimura**. *Al-Samaw'al's Curious  
Approach to Trigonometry*.

The 12th-century mathematician, Ibn Yahya al-Samaw'al al-Maghribi, now better known for his algebra, wrote the extensive treatise, *Exposure of the Errors of the Astronomers*. This fascinating under-studied work, containing criticisms of a number of astronomers, provides an interesting study of debates over the proper practice of medieval astronomy. In particular, al-Samaw'al stresses consistency and purity of method. One of his objections is to the methods that had been used to determine the geometrically unattainable sine of one degree in Ptolemy's *Almagest* as well as in later Muslim works. To avoid this seemingly unavoidable problem, al-Samaw'al presents an alternate trigonometric table. (Received April 29, 2015)