Every concert by the Dover Quartet in the Washington area has been extraordinary, if not exquisite. Admirers of the group will be delighted to learn that the Dover Quartet now serves as quartet in residence at the Kennedy Center. Their three-year term began Wednesday night at the opening concert of the Fortas Chamber Music series in the Terrace Theater, with a program showcasing the group’s astonishing range.

Webern’s “Langsamer Satz” is a solidly tonal piece, occasionally swooning with Straussian chromaticism and only the slightest hint of the composer’s later, more dissonant style. The Dover rendered it as lush, perfectly balanced sound, with an especially tender reading of the main melody from the group’s excellent violist, Milena Pajaro-van de Stadt.

Sections calling for mutes dampening the strings whispered with increasing intensity. From a music-box delicacy in the second of these sections, the group passed into a ravishing softness at the end, with the final resolution to a major chord from cellist Camden Shaw almost evaporating from the plucked strings.

During their residency at the Kennedy Center, the quartet will be working with Mason Bates, composer in residence. The Dover showed an affinity for one of Bates’s strongest compositions, the relatively early string quartet “From Amber Frozen,” which percolated with a breezy rhythmic buzz. The piece evolved from folksy plucking and rhythmic percussive bangs, influenced by West African music, to archetypal plush string legato, like that heard in the Webern ingeniously placed right before it.

Schubert is a Dover specialty, ever since their stupendous win at the Banff International String Quartet Competition in 2013. This performance of the composer’s 15th and final string quartet was something to be cherished. Schubert claimed the piece was in G major, but the two central movements are in minor keys, and the outer ones struggle fitfully toward their G major conclusions.

From the first movement’s major-to-minor opening, the Dover captured a fleeting, golden-tinged melancholy, with the delicate solo work of each instrument supported by poised, subservient accompaniment from the other three, including self-effacing violinists Joel Link and Bryan Lee. Judging by the sound produced, the Dover Quartet has grasped the strengths and weaknesses of the renovated Terrace Theater, which favors soft dynamics and turns a little harsh at loud ones. Every detail of this carefully etched Schubert came to the ears with utter clarity.