The Christmas repertory list for New York performing groups has long had Handel’s “Messiah” at the top and, for the more secular-minded, Bach’s “Brandenburg” Concertos presented nearly as plentifully. The Orchestra of St. Luke’s touched on this second tradition on Thursday evening, when 11 players opened its concert at Carnegie Hall with a zesty account of the “Brandenburg” Concerto No. 3.

But that was just a curtain raiser. For the main part of the program, Robert Spano led the full orchestra and the Atlanta Symphony Orchestra Chamber Chorus in two radically different sacred works that paid homage to the spirit of the season, if not Christmas specifically. (Mr. Spano is the music director of the Atlanta Symphony.) And that was odd, because one of the works — Bach’s Magnificat in D (BWV 243), which took up the second half of the program — could have been a Christmas piece if Mr. Spano and the orchestra had opted to use a different edition or tweaked the one they had.

When Bach originally wrote it, it was in a different key (E flat) and had four Christmas interpolations: German chorales interspersed among the Latin movements of the Magnificat text. His D major version of the score has a more brilliant sound: the key works better for the high trumpets that are the most immediately ear-catching elements of this score. But some ensembles transpose the chorales and add them to the D major version. St. Luke’s chose to play the D major version with no additions.
Not that you felt shortchanged. The ebullient account of the opening movement, with its note-perfect, timpani-supported trumpet lines and robust choral singing, was enough to convey Mr. Spano’s intentions and sweep away any concerns about his choice of Magnificat.

From there, the experience varied: in the more devotional solo movements, Sasha Cooke used her beautifully rounded mezzo-soprano tone to superb effect, and Susanna Phillips sang the soprano solos with clarity, power and precision. Nicholas Phan, the tenor, and Joshua Hopkins, the baritone, also made strong contributions but were unsteady and uneven in Bach’s florid passage work.

Between the Bach works, the orchestra and the women of the chorus offered Messiaen’s sumptuous “Trois petites liturgies de la présence divine” (1944), one of his early meditations on Roman Catholic mysticism and, more to the point for listeners today, his own research into color and rhythm.

Messiaen produced his own text, an ecstatic tapestry of biblical passages and writings by Thomas Aquinas and Thomas à Kempis, and wove around it a score that drew on birdcalls, Balinese and Javanese gamelan rhythms and melodies, the eerie electronic howl of the ondes Martenot (played here by Jean Laurendeau) and his own modernist approach to harmony.

Mr. Spano drew a kaleidoscopic performance from the St. Luke’s players and the Atlanta chorus. The pianist Margaret Kampmeier and the orchestra’s percussionists played with particular distinction.