A John Cage concert will be given at the Museum of Modern Art on Thursday, April 20, at 8:30 p.m., the fourth Composers' Showcase presentation of the season. Mr. Cage will appear with David Tudor in the American premiere performance of Cartridge Music (1960). Also on the program is 3#46.776 (1954), with Mr. Tudor and Toshi Ichiyanagi, pianos, and Kenji Kobayashi, violin. Variations II, a work written this year for piano and electronic equipment, will be performed by Mr. Tudor. Composers' Showcase is directed by Charles Schwartz.

Mr. Cage will discuss his work following the program.

Tickets for the concert, $3, may be purchased at the Museum, 11 West 53 Street, or by mail. Museum members receive a 25 per cent discount on one or two. Tickets include admission to galleries, open every Thursday until 10 p.m. Dinner and refreshments are available.

Cartridge Music, described by Mr. Cage as "live rather than canned electronic music, performed on a particular occasion for a specific audience," is produced by inserting into phonograph cartridges such objects as toothpicks, pipe cleaners, nails or wire, and amplifying "a new world of sound." Two cartridges are used, one suspended, the other on a table. The two performers, rather than cooperating, follow independent though interpenetrating plans of action. Variations II, a composition of "indeterminacy," is played from a "score" of plastic sheets, six with single straight lines, five with points, superimposed by the performer to fix variable frequency, amplitude, timbre, duration, and structure. Though 3#46.776 is "determined" music and the performers work from written parts, they remain free of one another. As in a mobile, the ensemble moves in separate directions while remaining part of the whole.

The controversial Mr. Cage appeared previously at the Museum of Modern Art in 1943 when he conducted a concert of percussion instruments. A student of Richard Buhlig, Adolph Weiss, Henry Cowell and Arnold Schoenberg, he currently teaches composition at the New School for Social Research. He is co-author, with Kathleen O'Donnell Hoover, of The Life and Works of Virgil Thomson. His score for Herbert Matter's film, Works of Calder, was awarded First Prize for Music by the Woodstock Art Film Festival in 1951. Always an innovator, his works for the "prepared piano," which he invented in 1938, brought him in 1949 both a Guggenheim Fellowship for Creative Work in the Field of Music and an Award from the National Academy of Arts and Letters "for having thus extended the boundaries of musical art." Mr. Cage is now a Fellow of the Center for Advanced Studies at Wesleyan University.

"My music is a process, not an object," says Mr. Cage. "I am interested in letting sounds be themselves instead of reflecting my ideas and feelings."

Richard Maxfield will provide technical electronic assistance for the concert.

Composers' Showcase and its counterpart, Jazz Profiles, are the only regular concert series entirely devoted to contemporary music and modern jazz.