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Tales from Dubna's oakwood: Bogoliubov, Pontecorvo, and the JINR seminars

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If much ink has been spilt on Bruno Pontecorvo's emigration to the USSR (1950), on the other hand, much less has been said about the scientific milieu in which he found himself: the Joint Institute for Nuclear Research (JINR) in Dubna. In this paper, we begin to fill this gap by focusing on the distinguished scientists with whom Pontecorvo interacted beyond direct collaborations; paying particular attention to Nikolai Bogoliubov, both a friend and a colleague of the Italian physicist. In the story, a fruitful arena for exchanges was provided by the tradition of seminars held at JINR; however, as it often happens with the more elusive (but no less interesting) aspects of "oral communities", what we have at disposal to reconstruct that atmosphere is little more than accounts or reminiscences of participants. On the basis of the latter—some of which are new—as well as of published works, we underline, across not-so-obviously-related branches of physics, an analogical resonance between Bogoliubov's notion of quasiparticle and Pontecorvo's first idea of neutrino-antineutrino oscillation and mixed particle. In doing this we also bring to the fore an historiographical question. While the probative character of analogies is easy to contest in absence of explicit recorded declarations—even when their plausibility is increased by a shared milieu and bond between two scientists—is it legitimate, we ask ourselves, to omit or neglect that whole oral-associative dimension, rather than to specify, with some due caveat, those possible links? Without sacrificing the peculiar character of the JINR seminars, we hope this instance will suggest to pay more attention to the other seminars and their possible role in shaping people and ideas of XX-century physics.

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