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Bruno Pontecorvo: Dalle scoperte di via Panisperna alle prospezioni petrolifere dell'Oklahoma

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During his American and Canadian period between 1940 and 1947, Bruno Pontecorvo was involved with mineral and oil survey to a degree that has often been overlooked in his biographies and other research work about his studies. This essay dissects patents and papers from that period authored by Pontecorvo himself and his collaborator at Well Surveys inc. William Russell to bring into light Pontecorvo's contributions to the then newly born branch of science and technology called petrophysics, the influence that his periods in Rome with Fermi and in Paris with Curie and Joliot had on his work, and the consequences and implications of his inventions for the mining and oil industries as well as the war effort with radioactive sample prospecting in Canada to support the Tube Alloy and Manhattan projects. Towards the end we explore documented connections between Pontecorvo and the Italian conglomerate AGIP/ENI, and throw an open question (supported by hints in later publications) that might suggest similar involvement with Soviet authorities after his defection in 1950. Such connections have (and might have, respectively) introduced the neutron-gamma and neutron-neutron prospection methods to Italy, and USSR.

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