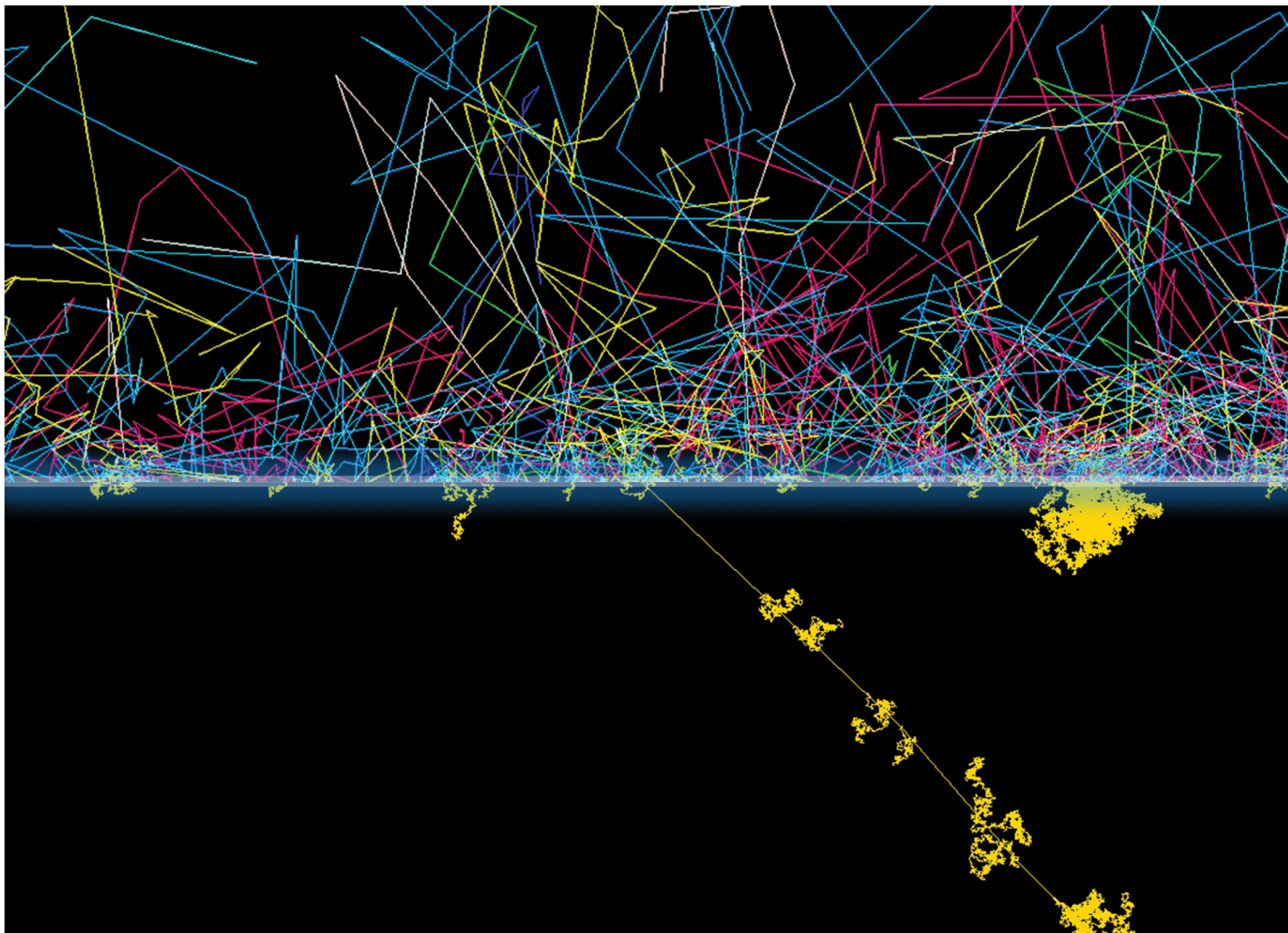




**Showcasing research from Dr Yusuke Matsuya,
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Development of a chemical code applicable to ions based on the PHITS code for efficient and visual radiolysis simulations

A general-purpose Monte Carlo code, Particle and Heavy Ion Transport code System (PHITS), enables the simulation of atomic interactions (see lower panel) and water radiolysis (see upper panel) at the DNA scale. These codes, named PHITS-TS for the physical stage and PHITS-Chem for the chemical stage, offer precise and intuitive insights into DNA damage induction in radiotherapy.

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