

1116-01-1617      **Sigeru Masuda\*** (hj9s-msd@asahi-net.or.jpj), 2-18-5, Tama-cho, Fuchu, 183-0002, Japan.  
*The Historical Derivatives of the Particular Value and the Particular Function in the Wave and Heat Theory.* Preliminary report.

We discuss Historical Development of Classical Heat Analyses, including Prévost 1792, Physico-Mechanical Researches of the Heat, Fourier 1822, Analytic Theory of the Heat, and Poisson 1835, Mathematical Theory of the Heat and finally Poincaré 1895 Analytic Theory of Propagation of Heat.

In the rivalry with Fourier, Poisson puts forth his personality independent of Fourier, the digressions on the mathematics. Poisson traces many historical facts of the origins of the wave equations including the trigonometric series by the trailblazers such as Euler, Lagrange, Laplace, Fourier, etc.

Poincaré puts forth many conceptions of pure analysis to solve the flux of heat from the viewpoint of up-to-date mathematical physics.

We talk about derivative productions of classical heat analyses such as particular value and eigenvalue, trigonometric series and its convergence, linear integral equation, meromorphic function, terrestrial system, or meteorology, etc. from the widely comparative viewpoint in the history of mathematics or mathematical physics. (Received September 20, 2015)