First seeds of X-ray lasers: a tribute to Pierre Jaeglé

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The series of the International Conference on X-ray Lasers was initiated by Pierre Jaeglé in 1986. Pierre passed away in November 2019. He was one of the passionate pioneers of what then became a very active field of research: generate population inversions and lasing action in the XUV range using hot and dense plasmas generated from high power lasers as an active medium.

In this paper I will remind some of Pierre's major scientific achievements, which contributed to the emergence of ultrashort coherent X-ray sources generated from intense lasers. Pierre early perceived the high potential of these new sources for scientific applications to various fields, and he took an active role in promoting the development of access opportunities for a broad scientific community. He shared his expertise on the field in a monograph published in 2006 [1] and in an extended review paper co-authored with Prof. Szymon Suckewer in 2009 [2].

[1] "Coherent Sources of XUV Radiation: Soft X-Ray Lasers and High-Order Harmonic Generation", 2006, Springer Series in Optical Sciences

[2] S. Suckewer, & P. Jaeglé, 2009, "X-Ray laser: past, present, and future", Laser Physics Letters, *6*(6), 411–436