**ABSTRACT of type (a) Fundamental Research**

**Title**

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***Please make sure you address the following three items when preparing your abstract:***

***- Novelty:*** *How novel is the SPH development to be presented this year compared with established state-of-the-art?*

***- Applicability / expected impact:*** *Does the new research have high applicability in problems that could not be solved before or can now be solved with higher accuracy? Can this work encourage new developments and new applications?*

***- Improvements / quality of results****: Does this work provide better results over the state-of-the-art (comparing with experiments, with previous SPH formulations or with other numerical solutions)? Does the new implementation present high efficiency when accelerating SPH code without losing accuracy? Does this work include a convergence analysis (if appropriate)?*

**Figure 1**. Example of a figure caption.

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**References**

[1] G. Eason, B. Noble, and I. N. Sneddon, “On certain integrals of Lipschitz-Hankel type involving products of Bessel functions,” Phil. Trans. Roy. Soc. London, vol. A247, pp. 529–551, April 1955. (references)

[2] J. Clerk Maxwell, A Treatise on Electricity and Magnetism, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp.68–73.

[3] I. S. Jacobs and C. P. Bean, “Fine particles, thin films and exchange anisotropy,” in Magnetism, vol. III, G. T. Rado and H. Suhl, Eds. New York: Academic, 1963, pp. 271–350.

[4] Y. Yorozu, M. Hirano, K. Oka, and Y. Tagawa, “Electron spectroscopy studies on magneto-optical media and plastic substrate interface,” IEEE Transl. J. Magn. Japan, vol. 2, pp. 740–741, August 1987 [Digests 9th Annual Conf. Magnetics Japan, p. 301, 1982].