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Editorial

Focus Point on the Physics of Cancer

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A special Focus Point on the Physics of Cancer has been proposed last year to the Editorial Board of the European Physical Journal Plus, aiming to collect the recent new developments in this topic. Scholars in physics and on the cancer fields have collaborated in order to develop diagnosis and care. In particular, the development of biophysics, experimental or theoretical, with a special insight on cancer research, has allowed a better understanding of the particular biology of cancer cells and its interaction with the micro-environnement.

In this 2015–2016 Focus Point, which includes eleven contributions on the physics of cancer at the cellular and tissue scales, a large diversity of topics of the modern research on cancer has been covered, e.g., the role of the stem cell proliferation, the tumor and its environment, improvement of diagnosis and therapeutics. Contributions are concerned with the modelling (mathematical, physical and numerical) but also with in vitro experiments. Different cancer diseases are involved such as glioblastoma, bladder cancer and melanoma.

For physicists, new research directions are yet opened and may be the subject of next focus point, such as immunology and cancer, immuno-therapy, cold-atmospheric plasma therapy independently of the genic therapy and also the consequences of these therapies for patients, such as X-radiation and fibrosis. The physicists have definively a role to play in all of the aspects of cancer research and I would like to take this opportunity to thank the Editorial Board and all the staff of $EPJ\ Plus$ for their continuous support to the authors.

Martine Ben Amar

 $Guest\ Editor$