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PREFACE

The standard model of particle physics accurately describes the negligible baryonic part, while unknown dark matter and dark energy dominate the Universe. Although the well-tested model has been proved to be successful by the discovery of Higgs boson, the nature of strong interaction at low energy scale is still far from the end, which is essential for us to understand atomic nuclei and compact stars as well as the early Universe. Certainly the quark degree of freedom could not be neglected here, and compact stars, where normal baryonic matter is intensely compressed by gravity, provide a unique test-ground for studying the non-perturbative behaviors of the strong interaction.

Heaven's message from a compressed matter star to the Earth dates back to 1054 AD when both Chinese and Japanese astronomers noted an unexpected and astonishing event: a supernova! The relics of the event includes the debris ejecta known as the Crab Nebula and a pulsar inside (the Crab Pulsar), both of which seem to tease our generation for still ignoring the explosion. Aiming at the puzzle, this bilateral meeting is to strengthen the researches, and foster collaborations between China and Japan, especially for the younger generation in both countries even the East Asia. Separated by a narrow strip of water, China and Japan have a long history of friendly exchanges, and we wish them every success in knowing nature's secrets.

On October 22, 2014, 17:30 Beijing time, this bilateral meeting came to a close. Yet, the presentations remain in forms of internet (<http://kiaa.pku.edu.cn/qcs2014/pro.htm>) and as the book of proceedings before you. Let's meet next time!