The Magnetism of the Quiet Sun

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The ever-increasing spatial resolution and sensitivity of solar spectropolarimetric measurements, along with novel ways to analyze the data, are leading to a very precise knowledge of quiet sun magnetic fields. Despite the weak signals they produce, significant progress has been made recently in topics such as the structure of magnetic elements in the quiet Sun, their magnetic and dynamic properties, their modes of appearance and disappearance, their evolution, the interactions they undergo, their role as agents of chromospheric and transition region heating, their contribution to the flux budget of the solar atmosphere, and their nature. In this talk I will review some of these aspects, pointing out not only the advances but also the open questions that will need to be addressed in the future.