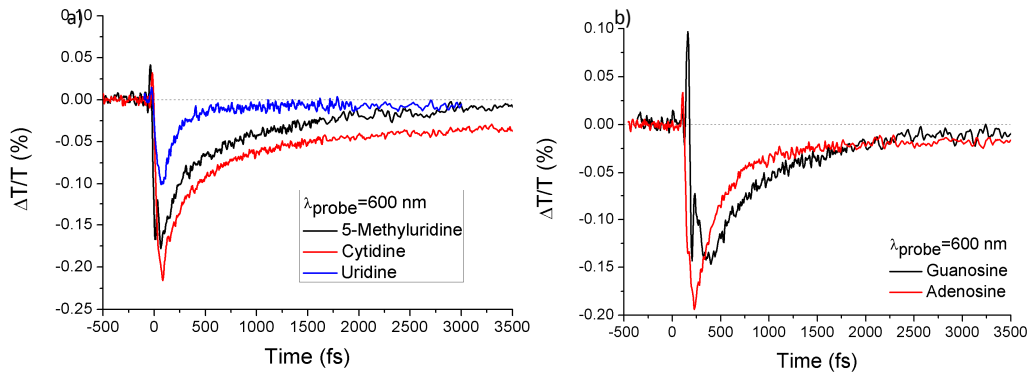
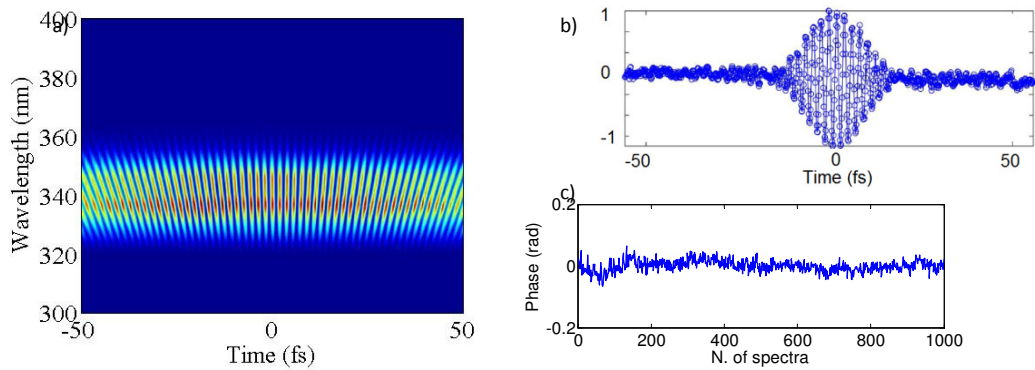


**Fig. 1.1:** a) Photography of the experimental setup for the generation of UV pulses; b) modified scheme of the 2DSI for UV pulse characterization; spectrum and phase of ultrabroadband pulses in the c) near-UV and d) deep-UV ranges.



**Fig. 1.2:** Pump-probe traces for a probe wavelength of 600 nm and pump with sub-20 fs pulses centered at 270 nm for a) pyrimidines and b) purines DNA bases.



**Fig. 1.3:** a) Interferogram of two variable delay UV pulses; b) corresponding autocorrelation trace; c) phase stability measurement.