

SYLLABUS

<i>Classification</i>	Lecture1	<i>Course No.</i>		<i>Instructor</i>	Kyung Taec Kim
<i>Course Title</i>	Temporal characterization of femtosecond laser pulses				
<u>Course Outline</u>					
<p>Femtosecond laser pulses are used in many applications such as laser-matter interaction studies, femtosecond laser machining, and medical applications. It is essential to know the temporal profile of the laser pulse in these applications. Many temporal characterization techniques have been developed, which can be classified into two groups depending on their measurement schemes: frequency and time domain techniques. The frequency-domain techniques are conventional techniques (ex, FROG, and SPIDER) popularly used thanks to their easy implementation. The time-domain techniques (ex, attosecond streaking and TIPTOE) are newly developed methods that directly measure the electric field of the laser pulse. Here we introduce various temporal characterization techniques and the basic idea of these techniques. Also, the advantage and disadvantages of the temporal characterization techniques are discussed.</p>					
<i>Prerequisite and References</i>					