ACM India Winter School, *Algorithms & Lower Bounds: To Improve, Or Not to Improve, That's the Question!*

03/01	09:00-09:45 L1: Introduction to the school **Akanksha**	10:15-11:00 L2: Analysis of algorithms and unconditional lower bounds I **Fahad**	11:30-12:30 Tutorial 1 **Sutanay**	14:00-14:45 L3: Reductions **Venkatesh**	15:15-16:15 Tutorial 2 **Sutanay**
04/01	09:00-09:45 L4: The theory of NP-completeness **Venkatesh**	10:15-11:15 Tutorial 3 **Vishwa+Asif**	11:45-12:30 L5: Analysis of algorithms and unconditional lower bounds II **Fahad**	14:00-14:45 L6: Analysis of algorithms and unconditional lower bounds III **Fahad**	15:15-16:15 Tutorial 4 **Archit**
05/01	09:00-09:45 L7: Dynamic Programming and improvements using lookups I **Philip**	10:15-11:00 L8: Dynamic Programming and improvements using lookups II **Philip**	11:30-12:30 Tutorial 5 **Vishwa**	14:00-14:45 L9: Popular fine grained complexity conjectures and their implications I **Akanksha**	15:15-16:00 L10: Popular fine grained complexity conjectures and their implications II **Akanksha**
06/01	09:00-09:45 L11: FFT-based polynomial multiplication and its applications I **Venkatesh**	10:15-11:15 Tutorial 6 **Vishwa**	11:45-12:30 L12: FFT-based polynomial multiplication and its applications II **Venkatesh**	14:00-15:00 Tutorial 7 **Archit**	15:30-16:15 L13: Preparatory lecture for the Polynomial Method I **Philip**
07/01	09:00-09:45 L14: Preparatory lecture for the Polynomial Method II **Philip**	10:15-11:15 Tutorial 8 **Archit**	11:45-12:30 L15: The Polynomial Method I **Arvind**	14:00-14:45 L16: The Polynomial Method II **Arvind**	15:15:16:15 Tutorial 9 **Archit**
08/01	09:00-09:45 L17: Popular fine grained complexity conjectures and their implications III **Akanksha**	10:15-11:15 Tutorial 10 **Archit**	11:45-12:30 L18: The Polynomial Method III **Arvind**	14:00-14:45 L19: The Polynomial Method IV **Arvind**	15:15-16:15 Feedback and discussion
10/01	09:00-09:45 L20: Popular fine grained complexity conjectures and their implications IV **Akanksha**	10:15-11:15 Tutorial 11 **Asif**	11:45-12:30 L21: The Polynomial Method V **Arvind**	14:00-14:45 L22: The 3-SUM problem: Algorithms I **Philip**	15:30-16:15 L23: The 3-SUM problem: Algorithms II **Philip**
11/01	09:00-09:45 L24: Popular fine grained complexity conjectures and their implications V **Akanksha**	10:15-11:15 Tutorial 12 **Asif**	11:45-12:30 L25: Popular fine grained complexity conjectures and their implications VI **Akanksha**	14:00-15:00 Tutorial 13 **Asif**	15:30-16:15 L26: Boolean Matrix Multiplication I **Philip**
12/01	09:00-09:45 L27: Boolean Matrix Multiplication II **Philip**	10:15-11:15 Tutorial 14 **Asif**	11:45-12:30 L28: Conclusion and future directions **Philip**		