

An Informal Introduction to Secondary Calculus (Indispensability of Secondary Calculus)

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1. From the observation mechanism in classical physics toward commutative algebra.
2. Differential calculus as an aspect of commutative algebra.
3. Representation of differential operators, jets and differential equations.
4. Differential equations are diffieties.
5. Calculus on diffieties and secondary calculus.
6. The course will be illustrated and motivated by examples from mechanics and physics and various applications will be shown.

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