Formal Solution: EXPLICIT Answers

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Evaluation of the radiation field arising from a specified set of thermodynamic and kinetic material conditions is known as the Formal Solution. The ability to find such solutions efficiently is critical to the iterative solution of the implicit coupled matter plus radiation problem. It is first shown how the exact relativistic radiation transport along a ray may be reduced to a set of easily evaluated integrals. The short characteristic approach is then used to find the formal solution of multi-dimensional radiation problems.