Label-Free Supervision of Neural Networks with Physics and Domain Knowledge

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What did the authors try to accomplish?

- supervised learning without labeled training data
- specify constraints that should hold over the output space, derived from prior domain knowledge

What were the key elements of the approach?

- approach is different to unsupervised learning since they use explicit constraints instead of hidden ones
- algebraic and logical constraints are used
- introduce a regularization term to prefer simpler functions

What parts can you use yourself?

- learning with domain knowledge and without labeled data

What other references do you want to follow?