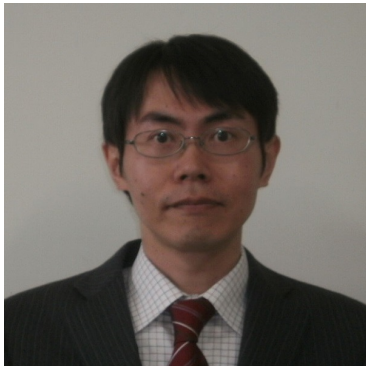




[General Education\(Science\)](#) > KIMURA Daiji



**KIMURA Daiji**

Organization	General Education(Science)
Position	Associate Professor
Academic Title	Doctor(Science)
Research Fields	Particle Physics

## << Research Subjects >>

1. [Effective field theories of quantum chromodynamics](#)
2. [Flavor physics](#)
3. [Strong magnetic field](#)

## << Academic Activities >>

### Papers and Notes

1. [T. Inagaki, D. Kimura, H. Kohyama: "Next to leading order calculation with dimensional regularization in Nambu Jona-Lasinio model", Int. J. Mod. Phys. A29, 1450048 \(2014\).](#)
2. [T. Inagaki, D. Kimura, H. Kohyama, A. Kvinikhidze: "Regularization parameter independent analysis in Nambu-Jona-Lasinio model", Int. J. Mod. Phys. A28, 1350164 \(2013\).](#)
3. [K.-I. Ishikawa, D. Kimura, K. Shigaki, A. Tsuji: "A numerical evaluation of vacuum polarization tensor in constant external magnetic fields", Int. J. Mod. Phys. A28, 1350100 \(2013\).](#)
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6. [D. Kimura, K. Y. Lee, T. Morozumi: "CP violation of Extended Higgs sector and Its impact on D0 to mu+mu- decay", GUT2012, American Institute of Physics 1467, 266 \(2012\)](#)
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8. [T. Inagaki, D. Kimura, H. Kohyama, A. Kvinikhidze: "Nonet meson properties in Nambu-Jona-Lasinio model with dimensional versus cutoff regularization", Phys. Rev. D83, 034005 \(2011\).](#)
9. [T. Fujihara, T. Inagaki, D. Kimura, H. Kohyama, A. Kvinikhidze: "NJL model with dimensional regularization at finite temperature", Nagoya Global COE Workshop SCGT in LHC Era, p.421 \(2011\)](#)
10. [D. Kimura, K. Y. Lee, T. Morozumi, K. Nakagawa: "Charged Higgs Flavor Changing Current in tau- to nuX K- pi0", Nucl. Phys. Proc. Suppl. 218, 3 \(2011\).](#)
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12. [D. Kimura, K. Nakagawa, T. Morozumi, K. Y. Lee: "Direct CP violation in hadronic tau decays", Nucl. Phys. Proc. Suppl. 189, 84 \(2009\).](#)
13. [T. Inagaki, D. Kimura, A. Kvinikhidze: "pi and sigma mesons at finite temperature and density in the NJL model with dimensional regularization", Phys. Rev. D77, 116004 \(2008\).](#)
14. [T. Fujihara, T. Inagaki, D. Kimura, A. Kvinikhidze: "Reconsideration of the 2-flavor NJL model with dimensional regularization at finite temperature and density", Prog. Theor. Phys. Suppl. 174, 72 \(2008\).](#)
15. [T. Fujihara, T. Inagaki, D. Kimura: "Influence of QED corrections on the orientation of chiral symmetry breaking in the NJL model", Prog. Theor. Phys. 117, 139 \(2007\).](#)
16. [T. Fujihara, T. Inagaki, D. Kimura: "Phase structure of NJL model with finite quark mass and QED correction", 2006 International Workshop On The Origin Of Mass And Strong Coupling Gauge, 213 \(2007\).](#)
17. [T. Fujihara, T. Inagaki, D. Kimura: "Color superconductivity and radius of quark star in extended NJL model by using the dimensional regularization", 7th Workshop On Quantum Field Theory Under The Influence Of External Conditions, J. Phys.](#)

- [A39, 6371 \(2006\).](#)
18. [T. Fujihara, S.K. Kang, C.S. Kim, D. Kimura, T. Morozumi: "Low scale seesaw model and lepton flavor violating rare B decays", Phys. Rev. D73, 074011 \(2006\).](#)
  19. [T. Fujihara, S. Kaneko, S.K. Kang, D. Kimura, T. Morozumi, M. Tanimoto: "Cosmological family asymmetry and CP violation", Phys. Rev. D72, 016006 \(2005\).](#)
  20. [T. Inagaki, D. Kimura, T. Murata: "Proper time formalism in a constant magnetic field at finite temperature and chemical potential", Int. J. Mod. Phys. A20, 4995 \(2005\).](#)
  21. [T. Inagaki, D. Kimura, T. Murata: "NJL model at finite chemical potential in a constant magnetic field", Workshop on Finite Density QCD at Nara, Prog. Theor. Phys. Suppl.153, 321, \(2004\).](#)
  22. [T. Inagaki, D. Kimura, T. Murata: "Four fermion interaction model in a constant magnetic field at finite temperature and chemical potential", Prog. Theor. Phys. 111, 371 \(2004\).](#)

## Presentations

1. [D. Kimura, T. Morozumi, Kang Young Lee: "The form factors of tau  \$\rightarrow\$  K pi \(eta\) nu decays and CP violation", KEK Flavor Factory Workshop, High Energy Accelerator Research Organization, KEK, Mar. \(2012\).](#)
2. [D. Kimura, T. Inagaki, H. Kohyama, A. Kvinikhidze: "2 and 3 flavor Nambu-Jona-Lasino models with dimensional regularization", Academia Sinica, Taiwan, May. \(2010\).](#)
3. [D. Kimura, T. Inagaki, H. Kohyama, A. Kvinikhidze: "3-flavor NJL model with dimensional regularization", New Frontiers in QCD, Yukawa Institute for Theoretical Physics, Kyoto University, Mar. \(2010\).](#)
4. [D. Kimura, T. Fujihara, T. Inagaki, H. Kohyama, A. Kvinikhidze: "NJL model with dimensional regularization at finite temperature", Nagoya Global COE Workshop SCGT in LHC Era, Dec. \(2009\).](#)
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6. [D. Kimura, T. Fujihara, T. Inagaki: "NJL model at finite temperature and density in dimensional regularization", Exploring QCD, Isaac Newton Institute, Cambridge, UK, Aug. \(2007\).](#)
7. [D. Kimura, T. Fujihara, T. Inagaki: "NJL model at finite temperature and density in dimensional regularization", Nagoya Mini-Workshop, Jul. \(2007\).](#)
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9. [D. Kimura, T. Murata, T. Inagaki: "NJL model at finite chemical potential in a constant magnetic field", Workshop on Finite Density QCD at Nara, Jul. \(2003\).](#)