

# Prof. BERİN BELMA ŞİRVANLI

## Personal Information

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## International Researcher IDs

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Publons / Web Of Science ResearcherID: AIC-6232-2022

Yoksis Researcher ID: 106359

## Education Information

Doctorate, Gazi University, Fen Fakültesi, Fizik, Turkey 1995 - 2000

Postgraduate, Gazi University, Fen Fakültesi, Fizik, Turkey 1991 - 1993

Undergraduate, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, Turkey 1985 - 1989

## Foreign Languages

English, B2 Upper Intermediate

## Dissertations

Doctorate, Standart model'de Radiatif Bu->taunutaugamma Bozunumu, Gazi University, Fen Fakültesi, Fizik, 2000

Postgraduate, 1/N Açılımı, Gazi University, Fen Fakültesi, Fizik, 1993

## Research Areas

Nuclear physics, Basic Particles and Areas

## Academic Titles / Tasks

Professor, Gazi University, Fen Fakültesi, Fizik, 2018 - Continues

Associate Professor, Gazi University, Fen Fakültesi, Fizik, 2010 - Continues

Associate Professor, Josef Stefan Institute, Slovenia, Josef Stefan Institute, Physics Department, 2013 - 2013

Research Assistant PhD, CERN, Physics, 2006 - 2006

Research Assistant PhD, CERN, Physics, 2004 - 2004

## Academic and Administrative Experience

Program Koordinatörü, Gazi University, Fen Fakültesi, 2007 - 2013

## Courses

Kuantum Fiziği, Undergraduate, 2020 - 2021  
Parçacık ve yüksek enerji fiziği, Undergraduate, 2020 - 2021  
İLERİ KUANTUM MEKANİĞİ, Postgraduate, 2020 - 2021  
Popüler Parçacık Fiziği, Undergraduate, 2020 - 2021  
GENEL FİZİK I VE II, Undergraduate, 2020 - 2021

## Advising Theses

ŞİRVANLI B. B., Searching of  $Z \rightarrow b\bar{b}$  decay in the standard model, Postgraduate, S.Eren(Student), 2014  
ŞİRVANLI B. B., SEARCHING OF HIGGS MECHANISM AND DECAY MODES IN THE STANDARD MODEL, Postgraduate, H.BARLAS(Student), 2008

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Nucleon's Axial-Vector Form Factor in the Hard-Wall AdS/QCD Model**  
Mamedov S., ŞİRVANLI B. B., Atayev I., Huseynova N.  
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.56, no.6, pp.1861-1874, 2017 (SCI-Expanded)
- II. **Search for  $c \rightarrow u l^{(+)} l^{(-)}$  transition in charmed baryon decays**  
Sirvanli B. B.  
PHYSICAL REVIEW D, vol.93, no.3, 2016 (SCI-Expanded)
- III. **Rare  $B_s \rightarrow \gamma \nu(\bar{\nu})$  Decay in Family Nonuniversal  $Z'$  Model**  
Sirvanli B. B.  
ADVANCES IN HIGH ENERGY PHYSICS, vol.2015, 2015 (SCI-Expanded)
- IV. **Lepton asymmetries for the  $B_s \rightarrow \gamma l^{(+)} l^{(-)}$  decay in a family nonuniversal  $Z'$  model**  
Sirvanli B. B.  
PHYSICAL REVIEW D, vol.89, no.9, 2014 (SCI-Expanded)
- V. **DOUBLE-LEPTON POLARIZATION ASYMMETRIES IN  $B \rightarrow K(1) l^{(+)} l^{(-)}$  DECAY IN UNIVERSAL EXTRA DIMENSION**  
Sirvanli B. B.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS A, vol.27, no.8, 2012 (SCI-Expanded)
- VI. **Double-lepton polarization asymmetries and branching ratio of the  $B \rightarrow \gamma l^{(+)} l^{(-)}$  transition in universal extra dimension**  
Azizi K., Pak N. K., Sirvanli B. B.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2012 (SCI-Expanded)
- VII. **Double-lepton polarization asymmetries and branching ratio in  $B \rightarrow K^{0(*)}(1430) l^{(+)} l^{(-)}$  transition from universal extra dimension model**  
Sirvanli B. B., Azizi K., Ipekoglu Y.  
JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2011 (SCI-Expanded)
- VIII. **Semileptonic  $\Lambda(b) \rightarrow \Lambda \nu(\bar{\nu})$  decay in the leptophobic  $Z'$  model**  
Sirvanli B. B.  
MODERN PHYSICS LETTERS A, vol.23, no.5, pp.347-358, 2008 (SCI-Expanded)
- IX. **Double-lepton polarization asymmetries in  $\Lambda(b) \rightarrow \Lambda l^{(+)} l^{(-)}$  decay in universal extra dimension model**  
ALIYEV T., Savci M., Sirvanli B. B.

- EUROPEAN PHYSICAL JOURNAL C, vol.52, no.2, pp.375-382, 2007 (SCI-Expanded)
- X. **A general analysis of the lepton polarizations in B-s  $\rightarrow$   $\gamma$  l(+)l(-) decays**  
Yilmaz U., Sirvanli B. B., Turan G.  
NUCLEAR PHYSICS B, vol.692, pp.249-269, 2004 (SCI-Expanded)
- XI. **New physics effects in the rare B-s  $\rightarrow$   $\gamma$  l(+)l(-) decays with a polarized photon**  
Yilmaz U., Sirvanli B. B., Turan G.  
EUROPEAN PHYSICAL JOURNAL C, vol.30, no.2, pp.197-205, 2003 (SCI-Expanded)
- XII. **RARE B-s  $\rightarrow$   $\nu(\bar{\nu})\gamma$  decay beyond the standard model**  
Cakir O., Sirvanli B. B.  
ACTA PHYSICA POLONICA B, vol.34, no.5, pp.2643-2649, 2003 (SCI-Expanded)
- XIII. **Rare B-s  $\rightarrow$   $\gamma$   $\nu(\bar{\nu})$  decay with polarized photon and new physics effects**  
Sirvanli B. B., Turan G.  
MODERN PHYSICS LETTERS A, vol.18, no.1, pp.47-56, 2003 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Sequential modelde Z yeni ayar bozonu için spin analizi**  
ŞİRVANLI B. B.  
Gazi University Journal of Science, vol.3, no.1, pp.395-399, 2015 (Scopus)
- II. **Search forward backward asymmetry due to the new Z gauge boson in e e collision**  
ŞİRVANLI B. B.  
Gazi University Journal of Science, vol.3, no.2, pp.27-29, 2015 (Scopus)
- III. **Rare B taunugamma decay and new physics effects**  
ŞİRVANLI B. B.  
Gazi University Journal of Science, vol.15, no.4, 2002 (ESCI)
- IV. **Radiative Bu  $\rightarrow$   $\gamma$  taunu Decay in the Standart Model**  
Şirvanlı B. B., Koru H.  
Hadronic journal, no.22, pp.467-476, 1999 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **İlk dört bölüm**  
YILMAZKAYA SÜNGÜ J., KIRCA Z., ŞİRVANLI B. B., DEMİR N.  
in: Temel Parçacıklara Giriş, Gülsen Öngüt, Editor, Nobel, Ankara, pp.1-112, 2015
- II. **Gazların kinetik teorisi**  
Şirvanlı B. B.  
in: Fen Bilimcileri ve Mühendislik için Fizik, Prof.Dr.Gülsen Öngüt, Editor, Akademi yayıncılık, Massachusetts, pp.1-945, 2009

## Refereed Congress / Symposium Publications in Proceedings

- I. **Spin Hamiltonian Investigations on Atomic Spin Gyroscope Using EasySpin Toolbox**  
Hatipoglu H., ŞİRVANLI B. B.  
10th International Conference on Recent Advances in Air and Space Technologies, RAST 2023, İstanbul, Turkey, 7 - 09 June 2023
- II. **The double lepton polarizations in Bs  $\rightarrow$   $\gamma$  l+l- decays with two Higgs doublet model**  
Şirvanlı B. B.  
3<sup>rd</sup> International Conference on computational and experimental science and engineering (ICCESEN-2016),

Antalya, Turkey, 19 - 24 October 2016, vol.23, pp.234-239

- III. **Search for c l l transition in charmed baryon decays**  
ŞİRVANLI B. B.  
Kongre, 4 - 06 August 2014
- IV. **Double lepton polarization asymmetries in B K11 l decay in UED model**  
ŞİRVANLI B. B.  
kongre, 4 - 06 August 2009
- V. **Semileptonic Lambda b Lambda nunubar decay in the Leptophobic Zprime model**  
ŞİRVANLI B. B.  
kongre, 6 - 08 August 2007
- VI. **A general analysis of the lepton polarizations in the B s gammal l decay**  
YILMAZ Ü. O., ŞİRVANLI B. B., TURAN G.  
kongre, 7 - 09 August 2005
- VII. **Examine to rare D meson decay in TAC charm Fabric**  
ÇAKIR O., SULTANOV S., ŞİRVANLI B. B., TURAN G.  
kongre, Turkey, 2 - 04 August 2004
- VIII. **Rare B s gammal l decay and new physics effects**  
ŞİRVANLI B. B.  
kongre, 5 - 07 August 2002
- IX. **The radiative B s tau nu gamma meson decay in the standard model**  
ŞİRVANLI B. B., koru h.  
kongre, 2 - 04 August 1999
- X. **Shifted 1 N expansion apply to deuteron**  
ŞİRVANLI B. B.  
kongre, 5 - 07 August 1996

## Expert Reports

- I. **PDOSE OSL DOZİMETRİ SİSTEMLERİNİN GELİŞTİRİLMESİ VE ÜRETİLMESİ**  
Şirvanlı B. B.  
KOSGEB, pp.10, Ankara, 2018

## Supported Projects

Sultanov S., Şirvanlı B. B., Project Supported by Other Official Institutions, CLIC ÇARPIŞTICISINDA DEMET DİNAMĞİNİN FİZİK ARAŞTIRMALARINA ETKİSİ, 2006 - 2008  
Çakır O., Şirvanlı B. B., Project Supported by Other Official Institutions, TÜRK HIZLANDIRICI KOMPLEKSİ, 2002 - 2005

## Activities in Scientific Journals

International Journal of computational and Experimental Science and Engineering (IJCESEN), Editor, 2017 - Continues

## Tasks In Event Organizations

Şirvanlı B. B., NUPAM-Monte Carlo Applications Spring School in Nuclear and Particle Physics, Science / Art Camp or Summer School Organization, Amasya, Turkey, Mayıs 2015  
Şirvanlı B. B., ULUYEF13-II.Uludağ Yüksek Enerji Fiziği Kış Okulu-2013, Science / Art Camp or Summer School Organization, Bursa, Turkey, Şubat 2013

Şirvanlı B. B., NUPAM-Monte Carlo Applications Spring School in Nuclear and Particle Physics, Science / Art Camp or Summer School Organization, Bitlis, Turkey, Mayıs 2012

Şirvanlı B. B., ULUYEF12-II.Uludağ Yüksek Enerji Fiziği Kış Okulu-2012, Science / Art Camp or Summer School Organization, Bursa, Turkey, Şubat 2012

## **Metrics**

Publication: 30

Citation (WoS): 96

Citation (Scopus): 83

H-Index (WoS): 6

H-Index (Scopus): 6

## **Scholarships**

Scientific Research, Other International Organizations, 2013 - 2013

NATO, NATO, 1999 - 1999

## **Non Academic Experience**

GAZİ ÜNİVERSİTESİ