RYSZARD STROYNOWSKI
Curriculum Vitae

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BORN:	June 11, 1946 in Lodz, Poland
CITIZENSHIP:	U.S.A.
MARITAL STATUS:	Married, two children.

EDUCATION:

1973	Doctorat en sciences physiques (Ph.D.), University of Geneva, Switzerland.
1968	Magister of physics(M.Sc.), University of Warsaw, Poland.

EMPLOYMENT:

Since 1993	Professor, SMU, Dallas, TX 75275.
1991-1993	Associate Professor, SMU, Dallas, TX 75275.
1983-1991	Senior Research Associate, Caltech, Pasadena, CA 91125.
1987	Lecturer, Caltech, Pasadena, CA 91125.
1980-1983	Senior Research Fellow, Caltech, Pasadena, CA 91125.
1975-1980	Research Associate, SLAC, Stanford, CA 94305.
1970-1975	Staff Physicist, CERN, Geneva, Switzerland.
1969-1970	Visiting Scientist, CERN, Geneva, Switzerland.
1968-1969	Assistant with tenure, University of Warsaw, Poland.

SHORT VISITS:

1997	Visitor, LAL Orsay, France
1986	Visiting Professor, UCLA (one term).
1983	Visiting Professor: Enseignement du troisieme cycle de la physique en Suisse Romande, Lausanne, Switzerland (one term).
1972	University of Helsinki, Helsinki, Finland.
1969	Niels Bohr Institute, Copenhagen, Denmark.

SOCIETIES:

Fellow:	American Physical Society.
Member:	Society of Physics Students.

CURRENT INTERESTS:

CLEO at CESR:	physics of tau leptons and heavy quarks
LHC and NLC:	accelerator based physics at highest available energies search for new physics beyond the Standard Model

RESEARCH EXPERIENCE:

1997 - present	ATLAS at LHC - optical digital links for calorimetry readout
1990 - present	CLEO at CESR - organized tau physics study group (precision measurement of decay branching fractions, limits of the tau neutrino mass, searches for lepton number violating decays, resolution of the one-prong problem) - initiated and led study of silica aerogel as candidate for particle identification in CLEO III. - construction of RICH LiF radiator and work on electronics for CLEO III - organized participation of two groups (Caltech and SMU) in CLEO.

1991-1993 GEM at SSC.
- lead physicist of the GEM magnet group. Organized a team of about 40 engineers and researchers who designed, costed and initiated R&D on the world largest superconducting solenoid magnet.
- member of the GEM Executive Committee and Collaboration Board, participated in defining global parameters of the experiment.
- initiated and led Project Definition to study light velocity in magnetic field and search for axion-like particles using Accelerator System String Test facility at SSC.

1985-1989 MARK II at SLC.
- designed and built Time-of-Flight system for particle identification.
- managed Caltech group responsible for ToF, Liquid Argon Calorimeter and Muon Identification systems.
- initiated and coauthored 4 out of 14 MarkII papers on the properties of the intermediate vector boson Z.
- initiated and led DOE funded R&D on development of the timing measurements using scintillating fiber. A prototype counter showed a factor of 3 improvement over the standard systems.

1980-1984 DELCO at PEP.
- spent a year participating in commissioning of the PEP storage ring.
- installed monitors to provide beam position measurements for individual event. Used this information for the lifetime measurements of charm and bottom quarks and tau lepton.
- initiated and led studies of direct electron production - a primary goal of the experiment.

1975-1980 SLAC E-127 experiment (LASS Spectrometer).
- proposed and was spokesman for the E-127 experiment to measure direct lepton pair production in hadronic collisions. Identified low mass electron pairs that could not originate from semileptonic decays of heavy quarks. Proposed phenomenological models explaining their origin.
- Designed and worked on construction of electromagnetic calorimeter for electron identification.

1973-1975 Split Field Magnet Facility at ISR, CERN.
- led the physics analysis of the particles produced at large transverse momentum, worked on the phenomenology of quark dynamics.
- worked on software development.

1968-1972 Bubble chamber experiments, CERN.
- worked on data analysis and phenomenology of strong interactions in several experiments with V8, 16 and 23 GeV pion and kaon beams.
- was a spokesman for first exposure using 100 GeV pion beam at Fermilab.
- provided first studies of inclusive reactions and worked on the phenomenology of the parton model.
- introduced spin dependent formalism into the theory of the overlap function extending the optical theorem to all angles and applied it to the phenomenology of pion-proton scattering.

SELECTED RECENT PUBLICATIONS:

Full list of publications includes over 250 items with over 180 published in refereed journals, predominantly Physical Review and Physical Review Letters. The following is a list of selected publications representative of recent projects.

With J. Bartelt *et al.* CLEO Collaboration, Search for neutrinoless decays of the tau lepton. *Phys. Rev. Lett.***73**, 1890 (1994).

With A. Weinstein, The tau lepton and its neutrino. *Annu. Rev. Nucl. Part. Sci.***43**,457-528 (1993).

With M. S. Alam *et al.* CLEO Collaboration, First measurement of the rate for the inclusive radiative penguin decay $b \to s\gamma$. *Phys. Rev. Lett.***74**, 2885 (1993).

With D. Cinabro *et al.* CLEO Collaboration, A limit on the tau neutrino mass. *Phys. Rev. Lett.***70**, 3700 (1993).

With T. Chui *et al.* Light retardation and axion search in external magnetic field. U.S. DOE Project Definition Study R-912, Final Report, (1994).

R. Stroynowski *et al.* GEM Magnet Engineering Design Report. GEM-TN-92-116 (1992).

With M. S. Alam *et al.* CLEO Collaboration, Tau decays into three charged leptons and two neutrinos. *Phys. Rev. Lett.***76**, 2637 (1996).

Light propagation and timing with scintillating fibers. *Nucl. Phys. B (Proc. Suppl.)* **23A**, *273 (1991).*

TEACHING EXPERIENCE:

1991 - present Southern Methodist University.
- taught undergraduate level courses concentrating of freshman physics and intermediate electrodynamics courses.
- initiated a Ph.D. program in physics. Since 1991 the program awarded 3 M.Sc. degrees and 2 Ph.D. degrees.
- supervises graduate students
- provided "outreach program" by lecturing in local schools
- participated in organizing undergraduate and graduate curriculum.

1980 - 1990 Caltech.
- taught undergraduate course on particle physics
- taught similar course at UCLA
- worked and supervised several graduate students (D.Koop, G.Mills, H. Yamamoto, L.Rivkin, E.Soderstrom, A.Weir, D.Wu)
- supervised several undergraduate research projects

1975 - 1980 SLAC.
- supervised research of graduate students (C.Woody, D.Blockus, M.Marshall)
- lectured at SLAC Summer School - graduate/postdoctoral level courses

1968 - 1969 University of Warsaw, Poland
- taught recitation and laboratory sections for freshmen physics course.