

# Владимир Германович Неудачин



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Скончался выдающийся теоретик-ядерщик **Владимир Германович Неудачин**, доктор физико-математических наук, профессор, заведующий Лабораторией теории атомного ядра ОФЯЯ (до 2012 г.) НИИЯФ МГУ, "Заслуженный научный сотрудник" МГУ, лауреат Ломоносовской премии МГУ.

Владимир Германович Неудачин родился 16 июля 1928 г. Окончил физический факультет МГУ в 1951 г. и аспирантуру физического факультета в 1954 г. В 1955 г. защитил кандидатскую диссертацию на тему "Вычислительные методы теории ядерных оболочек и ее квантовые числа". С 1954 г. работал в НИИЯФ МГУ. В 1965 г. защитил докторскую диссертацию на тему «Нуклонные ассоциации в легких ядрах». Профессор с 1991 г. С 1994 г. - главный научный сотрудник отдела физики атомного ядра. Зав. лабораторией теории атомного ядра с 1969 г. «Заслуженный научный сотрудник» Московского университета (1997), лауреат Ломоносовской премии (2002), член Ученого совета НИИЯФ МГУ (1970 - 2004). В Московском университете два года читал курс «Проблема многих тел в квантовой механике», руководил философским семинаром НИИЯФ МГУ (1965-1985).

Владимир Германович внес большой вклад в развитие ядерной физики и теории ядерных реакций.

Область его научных интересов составляли ассоциирование нуклонов в атомных ядрах, фотоядерные реакции, электронная структура атомов, молекул и твердого тела, нуклон-нуклонное взаимодействие, мезонные степени свободы в нуклонах и атомных ядрах, кварковая структура нуклонов и легчайших ядер.

В составе группы теоретиков НИИЯФ МГУ В.Г. Неудачиним построена микроскопическая теория кластеризации нуклонов в легких ядрах, широко подтвержденная в последствии в многочисленных экспериментах. Работы по ассоциированию нуклонов инициировали поток экспериментальных и теоретических исследований в этом направлении.

Им предсказано (и затем подтверждено экспериментально в НИИЯФ МГУ) большое конфигурационное расщепление гигантского дипольного резонанса у легких и средних атомных

ядер, что было зарегистрировано как открытие. Был предложен и разработан теоретический метод квазиупругого выбивания электронов быстрым налетающим электроном ( $e$ ,  $2e$ ) из атомов, молекул и твердых тел. На баз этого открытия была основана новая область в физике электронных столкновений, что впервые позволило в многочисленных экспериментах «увидеть» их импульсные распределения (волновые функции) для индивидуальных орбиталей.

В начале 70-х годов В.Г. Неудачиным с сотрудниками предложен так называемый Московский потенциал нуклон-нуклонного взаимодействия кварковой природы совершенно нового типа с узлом волновой функции вместо традиционного отталкивающего кора. Было предсказано и затем экспериментально открыто в НИИЯФ МГУ явление большого конфигурационного расщепления гигантского дипольного резонанса у легких и средних ядер с незамкнутыми оболочками. Предложен принципиально новый тип нуклон-нуклонного взаимодействия на малых расстояниях без отталкивающей сердцевины (на основе кварковой микроскопии).

В 80-е годы им был предложен процесс квазиупругого выбивания мезонов разных типов из нуклонов электронами высокой энергии (несколько ГэВ), что позволяет непосредственно измерять импульсные распределения мезонов в разных каналах виртуального распада  $N^* \rightarrow N + M$  и тем самым детально проверять кварковые модели мезонного облака нуклона.

В.Г. Неудачин подготовил 22 кандидата физико-математических наук. Среди его учеников 6 докторов наук с высокой международной репутацией. Неоднократно принимал участие в работе международных и всероссийских научных конференций, в том числе в качестве члена оргкомитетов. Автор более 200 публикаций, в том числе 4 монографий и 14 обзорных статей.

Источники, ссылки:

<http://www.sinp.msu.ru/ru/post/25252> , <http://danp.sinp.msu.ru/LTAN/neudachin.htm>

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